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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2020–0469; Project Identifier AD–2020–00258–E; Amendment 39–21122; AD 2020–10–04]

RIN 2120–AA64

Airworthiness Directives; General Electric Company Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all General Electric Company (GE) GE90–110B1 and GE90–115B model turbofan engines with a certain interstage high-pressure turbine (HPT) rotor seal installed. This AD requires initial and repetitive ultrasonic inspections (USIs) of the interstage HPT rotor seal and, depending on the results of the inspection, replacement of the interstage HPT rotor seal with a part eligible for installation. This AD also requires the removal of the interstage HPT rotor seal at the next engine shop visit. This AD was prompted by investigative findings from an event involving an uncontained interstage HPT rotor seal failure that resulted in debris penetrating the fuselage and the other engine. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective May 27, 2020.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 27, 2020.

The FAA must receive comments on this AD by June 26, 2020.

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- *Federal eRulemaking Portal:* Go to *https://www.regulations.gov.* Follow the instructions for submitting comments.
- *Fax:* 202–493–2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact General Electric Company, GE Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215; phone: 513–552–3272; email: *aviation.fleetsupport@ge.com.* You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781–238–7759. It is also available on the internet at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2020–0469.

Examining the AD Docket

You may examine the AD docket on the internet at *https://www.regulations.gov* by searching for and locating Docket No. FAA–2020–0469; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The street address for the Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Stephen Elwin, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781–238–7236; fax: 781–238–7199; email: *stephen.l.elwin@faa.gov.*

SUPPLEMENTARY INFORMATION:

Discussion

The FAA received a report of an event that occurred on October 20, 2019, in which a Boeing Model 777–300ER airplane, powered by GE GE90–115B model turbofan engines, experienced an uncontained interstage HPT rotor seal failure resulting in an aborted takeoff. The FAA has determined that an unusual flight profile is a contributing factor in the failure of the interstage HPT rotor seal. This condition, if not addressed, could result in an uncontained interstage HPT rotor seal release, release of high-energy debris, damage to the engine, and damage to the airplane. The FAA is issuing this AD to address the unsafe condition on these products.

Related Service Information Under 1 CFR Part 51

The FAA reviewed GE GE90–100 Alert Service Bulletin (ASB) 72–A0841 R00, dated February 26, 2020. The ASB describes procedures for performing USIs of the interstage HPT rotor seal and removing it from service. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the **ADDRESSES** section.

Other Related Service Information

The FAA reviewed GE GE90–100 Service Bulletin (SB) 72–0830 R00, dated January 17, 2020. The SB describes procedures for performing a USI at the air holes of the interstage HPT rotor seal on wing.

FAA's Determination

The FAA is issuing this AD because the Agency evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

AD Requirements

This AD requires initial and repetitive USIs of the interstage HPT rotor seal and, depending on the results of the inspection, replacement of the interstage HPT rotor seal with a part eligible for installation. This AD also requires the removal of the interstage HPT rotor seal at the next engine shop visit.

Interim Action

The FAA considers this AD interim action. The root cause of the interstage HPT rotor seal failure is still being investigated, and the FAA will consider further rulemaking depending on the results of the investigation.

Justification for Immediate Adoption and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C.) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for ''good cause,'' finds that those procedures are ''impracticable, unnecessary, or contrary to the public interest.'' Under this section, an agency, upon finding good cause, may issue a final rule without seeking comment prior to the rulemaking. Similarly, Section 553(d) of the APA authorizes agencies to make rules effective in less than 30 days, upon a finding of good cause.

The FAA has found the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because no domestic operators use this product. It is unlikely that the FAA will receive any adverse comments or useful information about this AD from U.S. operators. Therefore, the FAA finds good cause that notice and opportunity for prior public comment are unnecessary. In addition, for this same reason, the FAA finds that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, the FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the **ADDRESSES** section. Include the docket number FAA–2020–0469 and Project Identifier AD–2020–00258–E at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to *https://www.regulations.gov,* including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this final rule.

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 AD 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 AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as ''PROPIN.'' The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Stephen Elwin, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

Costs of Compliance

The FAA estimates that this AD affects 0 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Replace interstage HPT rotor seal	100 work-hours × $85 per hour = $8,500.	$540,000	$548,500	$0
USI of interstage HPT rotor seal	2 work-hours × $85 per hour = $170	0	170	0

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. ''Subtitle VII: Aviation Programs'' describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: ''General requirements.'' Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect 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.

For the reasons discussed above, I certify that this AD:

(1) Is not a ''significant regulatory action'' under Executive Order 12866, and

(2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

■ 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

■ 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2020–10–04 General Electric Company: Amendment 39–21122; Docket No. FAA–2020–0469; Project Identifier AD–2020–00258–E.

(a) Effective Date

This AD is effective May 27, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all General Electric Company (GE) GE90–110B1 and GE90–115B model turbofan engines with an interstage high-pressure turbine (HPT) rotor seal with a part number and serial number listed in Table 1 of GE GE90–100 Alert Service Bulletin (ASB) 72–A0841 R00, dated February 26, 2020 (''the ASB'').

(d) Subject

Joint Aircraft System Component (JASC) Code 7250, Turbine Section.

(e) Unsafe Condition

This AD was prompted by investigative findings from an event involving an uncontained interstage HPT rotor seal failure, resulting in debris penetrating the fuselage and the other engine. The FAA is issuing this AD to prevent failure of the interstage HPT rotor seal. The unsafe condition, if not addressed, could result in uncontained interstage HPT rotor seal release, release of high-energy debris, damage to the engine, and damage to the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Perform an ultrasonic inspection (USI) of the interstage HPT rotor seal in accordance with the Accomplishment Instructions, paragraph 3.B.(1), of the ASB, as follows:

(i) After the effective date of this AD, perform an initial USI of the interstage HPT rotor seal before reaching the additional cycles listed in Table 1 of the ASB. When computing the additional cycles, use the effective date of this AD instead of the issue date of the ASB.

(ii) Thereafter, repeat the USI of the interstage HPT rotor seal required by paragraph (g)(1)(i) within every 100 cycles since the last inspection.

(2) If, during any USI required by paragraph (g)(1)(i) or (ii) of this AD, a non-serviceable indication is found, as defined in paragraph 3.B.(2)(b) of the ASB, before further flight, remove the interstage HPT rotor seal from service.

(h) Mandatory Terminating Action

As a terminating action to the repetitive USI required by paragraph (g)(1)(ii) of this AD, at the next engine shop visit after the effective date of this AD, remove the affected interstage HPT rotor seal from service and replace with a part eligible for installation.

(i) Definition

For the purpose of this AD, an ''engine shop visit'' is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine case flanges, except separation of engine flanges solely for the purposes of transportation of the engine without subsequent maintenance does not constitute an engine shop visit.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k) of this AD. You may email your request to: *ANE-AD-AMOC@faa.gov.*

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

For more information about this AD, contact Stephen Elwin, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781–238–7236; fax: 781–238–7199; email: *stephen.l.elwin@faa.gov.*

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) General Electric Company (GE) GE90–100 Alert Service Bulletin 72–A0841 R00, dated February 26, 2020.

(ii) [Reserved]

(3) For GE service information identified in this AD, contact General Electric Company, GE Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215; phone: 513–552–3272; email: *aviation.fleetsupport@ge.com.*

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781–238–7759.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: *fedreg.legal@nara.gov,* or go to: *https://www.archives.gov/federal-register/cfr/ibr-locations.html.*

Issued on May 6, 2020.

Gaetano A. Sciortino,

Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2020–10048 Filed 5–11–20; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA–2019–0902; Airspace Docket No. 19–ACE–14]

RIN 2120–AA66

Proposed Amendment of Class E Airspace; Pratt, KS

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action amends the Class E airspace extending upward from 700 feet above the surface at Pratt Regional Airport, Pratt, KS. This action is the result of airspace review caused by the decommissioning of the Pratt non-directional beacon (NDB), which provided navigation information for the instrument procedures at this airport. This amendment also updates the airport name and the geographic coordinates to coincide with the FAA's aeronautical database. Airspace redesign is necessary for the safety and management of instrument flight rules (IFR) operations at this airport.

DATES: Effective 0901 UTC, July 16, 2020. The Director of the Federal Register approves this incorporation by reference action under Title 1 Code of Federal Regulations part 51, subject to the annual revision of FAA Order 7400.11 and publication of conforming amendments.

ADDRESSES: FAA Order 7400.11D, Airspace Designations and Reporting Points, and subsequent amendments can be viewed online at *https://www.faa.gov/air_traffic/publications/.* For further information, you can contact the Airspace Policy Group, Federal Aviation Administration, 800 Independence Avenue SW, Washington, DC 20591; telephone: (202) 267–8783. The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of FAA Order 7400.11D at NARA, email *fedreg.legal@nara.gov* or go to *https://www.archives.gov/federal-register/cfr/ibr-locations.html.*

FOR FURTHER INFORMATION CONTACT: Rebecca Shelby, Federal Aviation Administration, Operations Support Group, Central Service Center, 10101 Hillwood Parkway, Fort Worth, TX 76177; telephone (817) 222–5857.

SUPPLEMENTARY INFORMATION:

Authority for This Rulemaking

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority. This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart I, Section 40103. Under that section, the FAA is charged with prescribing regulations to assign the use of airspace necessary to ensure the safety of aircraft and the efficient use of airspace. This regulation is within the scope of that authority as it amends the Class E airspace extending upward from 700 feet above the surface at Pratt Regional Airport, Pratt, KS, to support IFR operations at this airport.

History

The FAA published a notice of proposed rulemaking in the **Federal Register** (84 FR 68379; December 16, 2019) for Docket No. FAA–2019–0902 to amend the Class E airspace extending upward from 700 feet above the surface at Pratt Regional Airport, Pratt, KS. Interested parties were invited to participate in this rulemaking effort by submitting written comments on the proposal to the FAA. No comments were received.

Class E airspace designations are published in paragraph 6005 of FAA Order 7400.11D, dated August 8, 2019, and effective September 15, 2019, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designations listed in this document will be published subsequently in the Order.

Availability and Summary of Documents for Incorporation by Reference

This document amends FAA Order 7400.11D, Airspace Designations and Reporting Points, dated August 8, 2019, and effective September 15, 2019. FAA Order 7400.11D is publicly available as listed in the **ADDRESSES** section of this document. FAA Order 7400.11D lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

The Rule

This amendment to Title 14 Code of Federal Regulations (14 CFR) part 71 by amending the Class E airspace extending upward from 700 feet above the surface within a 6.5-mile radius of the Pratt Regional Airport, Pratt, KS; and removing the Pratt NDB from the airspace legal description. Additionally, the airport name and geographic coordinates will be adjusted to coincide with the FAA's aeronautical database.

This action is the result of an airspace review caused by the decommissioning of the Pratt NDB, which provided navigation information for the instrument procedures at this airport.

FAA Order 7400.11, Airspace Designations and Reporting Points, is published yearly and effective on September 15.

Regulatory Notices and Analyses

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current, is non-controversial and unlikely to result in adverse or negative comments. It, therefore: (1) Is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that only affects air traffic procedures and air navigation, it is certified that this rule, when promulgated, does not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Environmental Review

The FAA has determined that this action qualifies for categorical exclusion under the National Environmental Policy Act in accordance with FAA Order 1050.1F, ''Environmental Impacts: Policies and Procedures,'' paragraph 5–6.5.a. This airspace action is not expected to cause any potentially significant environmental impacts, and no extraordinary circumstances exist that warrant preparation of an environmental assessment.

Lists of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

■ 1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

§ 71.1 [Amended]

■ 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.11D, Airspace Designations and Reporting Points, dated August 8, 2019, and effective September 15, 2019, is amended as follows:

Paragraph 6005 Class E Airspace Areas Extending Upward From 700 Feet or More Above the Surface of the Earth.

* * * * *

ACE KS E5 Pratt, KS [Amended]

Pratt Regional Airport, KS
(Lat. 37°42′09″ N, long. 98°44′49′ W)

That airspace extending upward from 700 feet above the surface within a 6.5-mile radius of Pratt Regional Airport.

Issued in Fort Worth, Texas, on May 5, 2020.

Steven T. Phillips,

Acting Manager, Operations Support Group, ATO Central Service Center.

[FR Doc. 2020–09895 Filed 5–11–20; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA–2019–0787; Airspace Docket No. 19–ASW–11]

RIN 2120–AA66

Amendment of Class E Airspace; Sweetwater, TX

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action amends the Class E airspace extending upward from 700 feet above the surface at Avenger Field Airport, Sweetwater, TX. This action is the result of airspace review caused by the decommissioning of the Sweetwater non-directional radio beacon (NDB). The geographic coordinates of the airport would also be updated to coincide with the FAA's aeronautic database. Airspace redesign is necessary for the safety and management of instrument flight rules (IFR) operations at this airport.

DATES: Effective 0901 UTC, July 16, 2020. The Director of the Federal Register approves this incorporation by reference action under Title 1 Code of Federal Regulations part 51, subject to the annual revision of FAA Order 7400.11 and publication of conforming amendments.

ADDRESSES: FAA Order 7400.11D, Airspace Designations and Reporting Points, and subsequent amendments can be viewed online at *https://www.faa.gov/air_traffic/publications/.* For further information, you can contact the Airspace Policy Group, Federal Aviation Administration, 800 Independence Avenue SW, Washington, DC 20591; telephone: (202) 267–8783. The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of FAA Order 7400.11D at NARA, email *fedreg.legal@nara.gov* or go to *https://www.archives.gov/federal-register/cfr/ibr-locations.html.*

FOR FURTHER INFORMATION CONTACT: Rebecca Shelby, Federal Aviation Administration, Operations Support Group, Central Service Center, 10101 Hillwood Parkway, Fort Worth, TX 76177; telephone (817) 222–5857.

SUPPLEMENTARY INFORMATION:

Authority for This Rulemaking

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority. This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart I, Section 40103. Under that section, the FAA is charged with prescribing regulations to assign the use of airspace necessary to ensure the safety of aircraft and the efficient use of airspace. This regulation is within the scope of that authority as it amends the Class E airspace extending upward from 700 feet above the surface at Avenger Field Airport, Sweetwater, TX, to support IFR operations at this airport.

History

The FAA published a notice of proposed rulemaking in the **Federal Register** (85 FR 5346; January 30, 2020) for Docket No. FAA–2019–0787 to amend the Class E airspace extending upward from 700 feet above the surface at Avenger Field Airport, Sweetwater, TX. Interested parties were invited to participate in this rulemaking effort by submitting written comments on the proposal to the FAA. No comments were received.

Class E airspace designations are published in paragraph 6005 of FAA Order 7400.11D, dated August 8, 2019, and effective September 15, 2019, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designations listed in this document will be published subsequently in the Order.

Availability and Summary of Documents for Incorporation by Reference

This document amends FAA Order 7400.11D, Airspace Designations and Reporting Points, dated August 8, 2019, and effective September 15, 2019. FAA Order 7400.11D is publicly available as listed in the **ADDRESSES** section of this document. FAA Order 7400.11D lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

The Rule

This amendment to Title 14 Code of Federal Regulations (14 CFR) part 71 by amending the Class E airspace extending upward from 700 feet above the surface within a 6.6-mile radius of Avenger Field Airport, Sweetwater, TX., within 2 miles each side of the 174° bearing from the airport extending from the 6.6-mile radius to 12.1 miles southeast of the airport, and by removing the Sweetwater NDB and associated extension from the airspace legal description; and removing the city associated with the airport from the legal description to comply with FAA Order 7400.2L, Procedure for Handling Airspace Matters and updating the geographic coordinates of the airport to coincide with the FAA's aeronautical database. This action will enhance safety and the management of IFR operations at the airport

FAA Order 7400.11, Airspace Designations and Reporting Points, is published yearly and effective on September 15.

Regulatory Notices and Analyses

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current, is non-controversial and unlikely to result in adverse or negative comments. It, therefore: (1) Is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that only affects air traffic procedures and air navigation, it is certified that this rule, when promulgated, does not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Environmental Review

The FAA has determined that this action qualifies for categorical exclusion under the National Environmental Policy Act in accordance with FAA Order 1050.1F, ''Environmental Impacts: Policies and Procedures,'' paragraph 5–6.5.a. This airspace action is not expected to cause any potentially significant environmental impacts, and no extraordinary circumstances exist that warrant preparation of an environmental assessment.

Lists of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

■ 1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

§ 71.1 [Amended]

■ 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.11D, Airspace Designations and Reporting Points, dated August 8, 2019, and effective September 15, 2019, is amended as follows:

Paragraph 6005 Class E Airspace Areas Extending Upward from 700 feet or More Above the Surface of the Earth.

* * * * *

ASW TX E5 Sweetwater, TX [Amended]

Avenger Field Airport, TX

(Lat. 32°28′03″ N, long 100°28′00″ W)

That airspace extending upward from 700 feet above the surface within a 6.6-mile radius of the Avenger Field Airport, and within 2 miles each side of the 174° bearing from the airport extending from the 6.6-mile radius to 12.1 miles southeast of the airport.

Issued in Fort Worth, Texas, on May 5, 2020.

Steven T. Phillips,

Acting Manager, Operations Support Group, ATO Central Service Center.

[FR Doc. 2020–09901 Filed 5–11–20; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA–2019–0034; Airspace Docket No. 19–ASW–1]

RIN 2120–AA66

Amendment of Class E Airspace; Alpine, TX

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action modifies Class E airspace extending upward from 700 feet above the surface at Alpine-Casparis Municipal Airport, Alpine, TX. This action is necessary due to the decommissioning of the Brewster County non-directional radio beacon (NDB), and cancellation of the NDB approach. It enhances the safety and management of standard instrument approach procedures for instrument flight rules (IFR) operations at this airport. Additionally, the geographic coordinates are being updated to coincide with the FAA's aeronautical database.

DATES: Effective 0901 UTC, July 16, 2020. The Director of the Federal Register approves this incorporation by reference action under Title 1 Code of Federal Regulations part 51, subject to the annual revision of FAA Order 7400.11 and publication of conforming amendments.

ADDRESSES: FAA Order 7400.11D, Airspace Designations and Reporting Points, and subsequent amendments can be viewed online at *http://www.faa.gov/air_traffic/publications/*. For further information, you can contact the Airspace Policy Group, Federal Aviation Administration, 800 Independence Avenue SW, Washington, DC 20591; telephone: (202) 267–8783. The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of FAA Order 7400.11D at NARA, email *fedreg.legal@nara.gov* or go to *https://www.archives.gov/federal-register/cfr/ibr-locations.html.*

FOR FURTHER INFORMATION CONTACT: Rebecca Shelby, Federal Aviation Administration, Operations Support Group, Central Service Center, 10101 Hillwood Parkway, Fort Worth, TX 76177; telephone (817) 222–5857.

SUPPLEMENTARY INFORMATION:

Authority for This Rulemaking

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority. This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart I, Section 40103. Under that section, the FAA is charged with prescribing regulations to assign the use of airspace necessary to ensure the safety of aircraft and the efficient use of airspace. This regulation is within the scope of that authority as it amends amend Class E airspace extending upward from 700 feet above the surface at Alpine-Casparis Municipal Airport, Alpine, TX, to support instrument flight rule operations at this airport.

History

The FAA published a notice of proposed rulemaking in the **Federal Register** (84 FR 5016; February 20, 2019) for Docket No. FAA–2019–0034 to amend Class E airspace extending upward from 700 feet above the surface at Alpine-Casparis Municipal Airport, Alpine, TX. Interested parties were invited to participate in this rulemaking effort by submitting written comments on the proposal to the FAA. No comments were received.

Class E airspace designations are published in paragraph 6005 of FAA Order 7400.11D, dated August 8, 2019, and effective September 15, 2019, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designations listed in this document will be published subsequently in the Order.

Availability and Summary of Documents for Incorporation by Reference

This document amends FAA Order 7400.11D, Airspace Designations and Reporting Points, dated August 8, 2019, and effective September 15, 2019. FAA Order 7400.11D is publicly available as listed in the **ADDRESSES** section of this document. FAA Order 7400.11D lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

The Rule

This amendment to Title 14 Code of Federal Regulations (14 CFR) amends part 71 by: Modifying the Class E airspace extending upward from 700 feet above the surface within a 6.6 mile radius of the Alpine-Casparis Municipal Airport and within 2 miles each side of the 023° bearing from the Alpine-Casparis Municipal Airport extending from the 6.6-mile radius to 10.5 miles northeast of the airport. The geographic coordinates of the airport are updated to coincide with the FAA's aeronautical database.

This action is the result of an airspace reconfiguration due to the decommissioning of the Brewster County NDB, and cancellation of the NDB approach. This action enhances the safety and management of the standard instrument approach.

FAA Order 7400.11, Airspace Designations and Reporting Points, is published yearly and effective on September 15.

Regulatory Notices and Analyses

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current, is non-controversial and unlikely to result in adverse or negative comments. It, therefore: (1) Is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that only affects air traffic procedures and air navigation, it is certified that this rule, when promulgated, does not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Environmental Review

The FAA has determined that this action qualifies for categorical exclusion under the National Environmental Policy Act in accordance with FAA Order 1050.1F, ''Environmental Impacts: Policies and Procedures,'' paragraph 5–6.5.a. This airspace action is not expected to cause any potentially significant environmental impacts, and no extraordinary circumstances exist that warrant preparation of an environmental assessment.

Lists of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

■ 1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

§ 71.1 [Amended]

■ 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.11D, Airspace Designations and Reporting Points, dated August 8, 2019, and effective September 15, 2019, is amended as follows:

Paragraph 6005 Class E Airspace Areas Extending Upward From 700 Feet or More Above the Surface of the Earth.

* * * * *

ASW TX E5 Alpine, TX [Amended]

Alpine-Casparis Municipal Airport, TX
(Lat. 30°23′03″ N, long. 103°41′01″ W)

That airspace extending upward from 700 feet above the surface within a 6.6 mile radius of the Alpine-Casparis Municipal Airport and within 2.0 miles each side of the 023° bearing from the Alpine-Casparis Municipal Airport extending from the 6.6-mile radius to 10.5 miles northeast of the airport.

Issued in Fort Worth, Texas, on May 5, 2020.

Steven T. Phillips,

Acting Manager, Operations Support Group, ATO Central Service Center.

[FR Doc. 2020–09899 Filed 5–11–20; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA–2019–0790; Airspace Docket No. 19–ASW–10]

RIN 2120–AA66

Amendment of Class E Airspace; Tahlequah, OK

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action amends the Class E airspace extending upward from 700 feet above the surface at Tahlequah Municipal Airport in Tahlequah, OK. This action is the result of airspace review caused by the decommissioning of the Tahlequah non-directional radio beacon (NDB). The geographic coordinates of the airport would also be updated to coincide with the FAA's aeronautical database. Airspace redesign is necessary for the safety and management of instrument flight rules (IFR) operations at this airport.

DATES: Effective 0901 UTC, July 16, 2020. The Director of the Federal Register approves this incorporation by reference action under Title 1 Code of Federal Regulations part 51, subject to the annual revision of FAA Order 7400.11 and publication of conforming amendments.

ADDRESSES: FAA Order 7400.11D, Airspace Designations and Reporting Points, and subsequent amendments can be viewed online at *https://www.faa.gov/air_traffic/publications/.* For further information, you can contact the Airspace Policy Group, Federal Aviation Administration, 800 Independence Avenue SW, Washington, DC 20591; telephone: (202) 267–8783. The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of FAA Order 7400.11D at NARA, email *fedreg.legal@nara.gov* or go to *https://www.archives.gov/federal-register/cfr/ibr-locations.html.*

FOR FURTHER INFORMATION CONTACT: Rebecca Shelby, Federal Aviation Administration, Operations Support Group, Central Service Center, 10101 Hillwood Parkway, Fort Worth, TX 76177; telephone (817) 222–5857.

SUPPLEMENTARY INFORMATION:

Authority for This Rulemaking

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority. This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart I, Section 40103. Under that section, the FAA is charged with prescribing regulations to assign the use of airspace necessary to ensure the safety of aircraft and the efficient use of airspace. This regulation is within the scope of that authority as it amends the Class E airspace extending upward from 700 feet above the surface at Tahlequah Municipal Airport, Tahlequah, OK, in support of standard instrument approach procedure for IFR operations at this airport.

History

The FAA published a notice of proposed rulemaking in the **Federal Register** (85 FR 4244; January 24, 2020) for Docket No. FAA–2019–0790 to amend the Class E airspace extending upward from 700 feet above the surface at Tahlequah Municipal Airport, Tahlequah, OK. Interested parties were invited to participate in this rulemaking effort by submitting written comments on the proposal to the FAA. No comments were received.

Class E airspace designations are published in paragraph 6005 of FAA Order 7400.11D, dated August 8, 2019, and effective September 15, 2019, which is incorporated by reference in 14 CFR 71.1. The Class E airspace designations listed in this document will be published subsequently in the Order.

Availability and Summary of Documents for Incorporation by Reference

This document amends FAA Order 7400.11D, Airspace Designations and Reporting Points, dated August 8, 2019, and effective September 15, 2019. FAA Order 7400.11D is publicly available as listed in the **ADDRESSES** section of this document. FAA Order 7400.11D lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

The Rule

This amendment to Title 14 Code of Federal Regulations (14 CFR) part 71 by amending the Class E airspace extending upward from 700 feet above the surface within a 6.5-mile radius (increased from 6.4-mile radius) of Tahlequah Municipal Airport, Tahlequah, OK; also, updating the geographic coordinates of the airport to coincide with the FAA's aeronautical database. This action is the result of an airspace review caused by the cancellation and revision of the instrument procedures at this airport.

FAA Order 7400.11, Airspace Designations and Reporting Points, is published yearly and effective on September 15.

Regulatory Notices and Analyses

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current, is non-controversial and unlikely to result in adverse or negative comments. It, therefore: (1) Is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44

FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that only affects air traffic procedures and air navigation, it is certified that this rule, when promulgated, does not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Environmental Review

The FAA has determined that this action qualifies for categorical exclusion under the National Environmental Policy Act in accordance with FAA Order 1050.1F, ''Environmental Impacts: Policies and Procedures,'' paragraph 5–6.5.a. This airspace action is not expected to cause any potentially significant environmental impacts, and no extraordinary circumstances exist that warrant preparation of an environmental assessment.

Lists of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

■ 1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

§ 71.1 [Amended]

■ 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.11D, Airspace Designations and Reporting Points, dated August 8, 2019, and effective September 15, 2019, is amended as follows:

Paragraph 6005 Class E Airspace Areas Extending Upward From 700 Feet or More Above the Surface of the Earth.

* * * * *

ASW OK E5 Tahlequah, OK [Amended]

Tahlequah Municipal Airport, OK
(Lat. 35°55′49″ N, long 95°00′16″ W)

Tahlequah City Hospital Heliport, OK, Point in Space Coordinates
(Lat. 35°55′14″ N, long 94°57′47″ W)

That airspace extending upward from 700 feet above the surface within a 6.5-mile radius of the Tahlequah Municipal Airport and that airspace within a 6-mile radius of the Point in Space serving Tahlequah City Hospital Airport.

Issued in Fort Worth, Texas, on May 5, 2020.

Steven T. Phillips,

Acting Manager, Operations Support Group, ATO Central Service Center.

[FR Doc. 2020–09900 Filed 5–11–20; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 71

[Docket No. FAA–2019–0349; Airspace Docket No. 19–AGL–14]

RIN 2120–AA66

Amendment of Class E Airspace; Rockford, IL

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action modifies Class D airspace and Class E airspace areas extending upward from 700 feet or more above the surface of the earth at Chicago/Rockford International Airport (formerly Greater Rockford Airport) in Rockford, IL, based on the result of an airspace review caused by the decommissioning of the GILMY locator outer marker (LOM). The GILMY LOM and Greater Rockford ILS localizer are no longer needed in the description of the Class D and E–5 airspace. This amendment also updates the airport name to coincide with the FAA's aeronautical database. Airspace redesign is necessary for the safety and management of instrument flight rules (IFR) operations at this airport.

DATES: Effective 0901 UTC, July 16, 2020. The Director of the Federal Register approves this incorporation by reference action under Title 1 Code of Federal Regulations part 51, subject to the annual revision of FAA Order 7400.11 and publication of conforming amendments.

ADDRESSES: FAA Order 7400.11D, Airspace Designations and Reporting Points, and subsequent amendments can be viewed online at *http://www.faa.gov/air_traffic/publications/.* For further information, you can contact the Airspace Policy Group, Federal Aviation Administration, 800 Independence Avenue SW, Washington, DC 20591; telephone: (202) 267–8783. The Order is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of FAA Order 7400.11D at NARA, email *fedreg.legal@nara.gov* or go to *https://www.archives.gov/federal-register/cfr/ibr-locations.html.*

FOR FURTHER INFORMATION CONTACT: Rebecca Shelby, Federal Aviation Administration, Operations Support Group, Central Service Center, 10101 Hillwood Parkway, Fort Worth, TX 76177; telephone (817) 222–5857.

SUPPLEMENTARY INFORMATION:

Authority for This Rulemaking

The FAA's authority to issue rules regarding aviation safety is found in Title 49 of the United States Code. Subtitle I, Section 106 describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority. This rulemaking is promulgated under the authority described in Subtitle VII, Part A, Subpart I, Section 40103. Under that section, the FAA is charged with prescribing regulations to assign the use of airspace necessary to ensure the safety of aircraft and the efficient use of airspace. This regulation is within the scope of that authority as it amends Class D and E5 airspace at Chicago/Rockford International Airport, in support of standard instrument approach procedures for IFR operations at the airport.

History

The FAA published a notice of proposed rulemaking in the **Federal Register** (84 FR 22746; May 20, 2019) for Docket No. FAA–2019–0349 to amend Class D and E airspace extending upward from 700 feet above the surface at Chicago/Rockford International Airport, Rockford, IL. Interested parties were invited to participate in this rulemaking effort by submitting written comments on the proposal to the FAA. One comment was received. The commenter said, ''Overall, this does seem like a solid proposed rule and one that would ensure the safety of many and the proper use of instruments over this proposed airspace. However, my only hesitation is for some of the small airplane owners who regularly use these airports. Will they still be able to use these airports as they have been if their aircrafts are not equipped with standard instrument approach procedures (SIAPs)? If not, I think there should be some sort of grandfather clause for the pilots and aircraft owners who have been using this airspace for years. I would appreciate hearing the FAAs thoughts on this.''

The small aircraft owners will still be able to use airport but with not all of the current conventional approach procedure (*e.g.* ILS, LOC or VOR).

Chicago/Rockford International Airport will have two instrument landing systems approaches for runways 01 and 07. Additionally, any aircraft should be within 100 NM of a safe-landing airport with a conventional approach from almost any point in CONUS.

Class D and E airspace designations are published in paragraph 5000 and 6005 of FAA Order 7400.11D, dated August 8, 2019, and effective September 15, 2019, which is incorporated by reference in 14 CFR 71.1. The Class D and E airspace designations listed in this document will be published subsequently in the Order.

Availability and Summary of Documents for Incorporation by Reference

This document amends FAA Order 7400.11D, Airspace Designations and Reporting Points, dated August 8, 2019, and effective September 15, 2019. FAA Order 7400.11D is publicly available as listed in the **ADDRESSES** section of this document. FAA Order 7400.11D lists Class A, B, C, D, and E airspace areas, air traffic service routes, and reporting points.

The Rule

This action amends Title 14 Code of Federal Regulations (14 CFR) part 71 by modifying Class D airspace extending upward from the surface of the earth to and including 3,200 feet MSL within a 4.6-mile radius of the Chicago/Rockford International Airport by removing the extension to the south out to the GILMY LOM. Also, modifying Class E airspace extending upward from 700 feet above the surface within a 7.1-mile radius of the Chicago/Rockford International Airport and removing the extension to the south associated with the Greater Rockford ILS localizer. This action enhances safety and the management of IFR operations at the airport. In addition, the airport name is adjusted to coincide with the FAA's aeronautical database. The Greater Rockford ILS localizer and the GILMY LOM are no longer needed to describe the airspaces and have been removed.

FAA Order 7400.11, Airspace Designations and Reporting Points, is published yearly and effective on September 15.

Regulatory Notices and Analyses

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current, is non-controversial and unlikely to result in adverse or negative comments. It, therefore: (1) Is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal. Since this is a routine matter that only affects air traffic procedures and air navigation, it is certified that this rule, when promulgated, does not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Environmental Review

The FAA has determined that this action qualifies for categorical exclusion under the National Environmental Policy Act in accordance with FAA Order 1050.1F, ''Environmental Impacts: Policies and Procedures,'' paragraph 5–6.5.a. This airspace action is not expected to cause any potentially significant environmental impacts, and no extraordinary circumstances exist that warrant preparation of an environmental assessment.

Lists of Subjects in 14 CFR Part 71

Airspace, Incorporation by reference, Navigation (air).

Adoption of the Amendment

In consideration of the foregoing, the Federal Aviation Administration amends 14 CFR part 71 as follows:

PART 71—DESIGNATION OF CLASS A, B, C, D, AND E AIRSPACE AREAS; AIR TRAFFIC SERVICE ROUTES; AND REPORTING POINTS

■ 1. The authority citation for part 71 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g); 40103, 40113, 40120; E.O. 10854, 24 FR 9565, 3 CFR, 1959–1963 Comp., p. 389.

§ 71.1 [Amended]

■ 2. The incorporation by reference in 14 CFR 71.1 of FAA Order 7400.11D, Airspace Designations and Reporting Points, dated August 8, 2019, and effective September 15, 2019, is amended as follows:

Paragraph 5000 Class D

* * * * *

AGL IL D Rockford, IL [Revised]

Chicago/Rockford International Airport, IL (Lat. 42°11′43′ N, long. 89°05′50″ W)

That airspace extending upward from the surface of the earth to and including 3,200 feet MSL within a 4.6-mile radius of the Chicago/Rockford International Airport.

* * * * *

Paragraph 6005 Class E Airspace Areas Extending Upward From 700 Feet or More Above the Surface of the Earth.

* * * * *

AGL IL E5 Rockford, IL [Amended]

Chicago/Rockford International Airport, IL (Lat. 42°11′43″ N, long. 89°05′50″ W)

That airspace extending upward from 700 feet above the surface within a 7.1-mile radius of the Chicago/Rockford International Airport.

Issued in Fort Worth, Texas, on May 5, 2020.

Steven T. Phillips,

Acting Manager, Operations Support Group, ATO Central Service Center.

[FR Doc. 2020–09893 Filed 5–11–20; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. 31310 Amdt. No. 3903]

Standard Instrument Approach Procedures, and Takeoff Minimums and Obstacle Departure Procedures; Miscellaneous Amendments

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This rule establishes, amends, suspends, or removes Standard Instrument Approach Procedures (SIAPs) and associated Takeoff Minimums and Obstacle Departure Procedures (ODPs) for operations at certain airports. These regulatory actions are needed because of the adoption of new or revised criteria, or because of changes occurring in the National Airspace System, such as the commissioning of new navigational facilities, adding new obstacles, or changing air traffic requirements. These changes are designed to provide safe and efficient use of the navigable airspace and to promote safe flight operations under instrument flight rules at the affected airports.

DATES: This rule is effective May 12, 2020. The compliance date for each SIAP, associated Takeoff Minimums, and ODP is specified in the amendatory provisions.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 12, 2020.

ADDRESSES: Availability of matters incorporated by reference in the amendment is as follows:

For Examination

1. U.S. Department of Transportation, Docket Ops-M30, 1200 New Jersey Avenue SE, West Bldg., Ground Floor, Washington, DC 20590–0001.
2. The FAA Air Traffic Organization Service Area in which the affected airport is located;
3. The office of Aeronautical Navigation Products, 6500 South MacArthur Blvd., Oklahoma City, OK 73169 or,
4. The National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email *fedreg.legal@nara.gov* or go to: *https://www.archives.gov/federal-register/cfr/ibr-locations.html*.

Availability

All SIAPs and Takeoff Minimums and ODPs are available online free of charge. Visit the National Flight Data Center at *nfdc.faa.gov* to register. Additionally, individual SIAP and Takeoff Minimums and ODP copies may be obtained from the FAA Air Traffic Organization Service Area in which the affected airport is located.

FOR FURTHER INFORMATION CONTACT: Thomas J. Nichols, Flight Procedures and Airspace Group, Flight Technologies and Procedures Division, Flight Standards Service, Federal Aviation Administration. Mailing Address: FAA Mike Monroney Aeronautical Center, Flight Procedures and Airspace Group, 6500 South MacArthur Blvd., Registry Bldg 29, Room 104, Oklahoma City, OK 73169. Telephone: (405) 954–4164.

SUPPLEMENTARY INFORMATION: This rule amends Title 14 of the Code of Federal Regulations, Part 97 (14 CFR part 97), by establishing, amending, suspending, or removes SIAPS, Takeoff Minimums and/or ODPS. The complete regulatory description of each SIAP and its associated Takeoff Minimums or ODP for an identified airport is listed on FAA form documents which are incorporated by reference in this amendment under 5 U.S.C. 552(a), 1 CFR part 51, and 14 CFR part 97.20. The applicable FAA forms are FAA Forms 8260–3, 8260–4, 8260–5, 8260–15A, and 8260–15B when required by an entry on 8260–15A.

The large number of SIAPs, Takeoff Minimums and ODPs, their complex nature, and the need for a special format make publication in the **Federal Register** expensive and impractical. Further, airmen do not use the regulatory text of the SIAPs, Takeoff Minimums or ODPs, but instead refer to their graphic depiction on charts printed by publishers of aeronautical materials. Thus, the advantages of incorporation by reference are realized and publication of the complete description of each SIAP, Takeoff Minimums and ODP listed on FAA form documents is unnecessary. This amendment provides the affected CFR sections and specifies the types of SIAPs, Takeoff Minimums and ODPs with their applicable effective dates. This amendment also identifies the airport and its location, the procedure, and the amendment number.

Availability and Summary of Material Incorporated by Reference

The material incorporated by reference is publicly available as listed in the **ADDRESSES** section.

The material incorporated by reference describes SIAPS, Takeoff Minimums and/or ODPS as identified in the amendatory language for part 97 of this final rule.

The Rule

This amendment to 14 CFR part 97 is effective upon publication of each separate SIAP, Takeoff Minimums and ODP as Amended in the transmittal. Some SIAP and Takeoff Minimums and textual ODP amendments may have been issued previously by the FAA in a Flight Data Center (FDC) Notice to Airmen (NOTAM) as an emergency action of immediate flight safety relating directly to published aeronautical charts.

The circumstances that created the need for some SIAP and Takeoff Minimums and ODP amendments may require making them effective in less than 30 days. For the remaining SIAPs and Takeoff Minimums and ODPs, an effective date at least 30 days after publication is provided.

Further, the SIAPs and Takeoff Minimums and ODPs contained in this amendment are based on the criteria contained in the U.S. Standard for Terminal Instrument Procedures (TERPS). In developing these SIAPs and Takeoff Minimums and ODPs, the TERPS criteria were applied to the conditions existing or anticipated at the affected airports. Because of the close and immediate relationship between these SIAPs, Takeoff Minimums and ODPs, and safety in air commerce, I find that notice and public procedure under 5 U.S.C. 553(b) are impracticable and contrary to the public interest and, where applicable, under 5 U.S.C. 553(d), good cause exists for making some SIAPs effective in less than 30 days.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT Regulatory Policies and Procedures (44 FR 11034; February 26,1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal.

For the same reason, the FAA certifies that this amendment will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 97

Air Traffic Control, Airports, Incorporation by reference, Navigation (Air).

Issued in Washington, DC, on May 1, 2020.

Robert C. Carty,

Executive Deputy Director, Flight Standards Service.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me, Title 14, Code of Federal Regulations, Part 97 (14 CFR part 97) is amended by establishing, amending, suspending, or removing Standard Instrument Approach Procedures and/or Takeoff Minimums and Obstacle Departure Procedures effective at 0901 UTC on the dates specified, as follows:

PART 97—STANDARD INSTRUMENT APPROACH PROCEDURES

■ 1. The authority citation for part 97 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40103, 40106, 40113, 40114, 40120, 44502, 44514, 44701, 44719, 44721–44722.

PART 97 [AMENDED]

■ 2. Part 97 is amended to read as follows:

Effective 18 June 2020

Athens/Albany, OH, Ohio University, NDB RWY 25, Amdt 9C

Effective 16 July 2020

Gulkana, AK, Gulkana, Takeoff Minimums and Obstacle DP, Amdt 8
Hampton, GA, Henry County, Takeoff Minimums and Obstacle DP, Amdt 2A
Honolulu, HI, Daniel K Inouye Intl, ILS RWY 8L, Amdt 24A
Belleville, KS, Belleville Muni, RNAV (GPS) RWY 18, Orig-C
Belleville, KS, Belleville Muni, RNAV (GPS) RWY 36, Orig-C
Belleville, KS, Belleville Muni, VOR–A, Amdt 3D
Parsons, KS, Tri-City, VOR RWY 17, Orig-A
Caldwell, NJ, Essex County, RNAV (GPS) RWY 4, Orig-D

Syracuse, NY, Syracuse Hancock Intl, RNAV (RNP) Y RWY 10, Orig-B
Syracuse, NY, Syracuse Hancock Intl, RNAV (RNP) Y RWY 28, Orig-B
Abilene, TX, Abilene Rgnl, Takeoff Minimums and Obstacle DP, Amdt 4

[FR Doc. 2020–10007 Filed 5–11–20; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 97

[Docket No. 31311; Amdt. No. 3904]

Standard Instrument Approach Procedures, and Takeoff Minimums and Obstacle Departure Procedures; Miscellaneous Amendments

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This rule amends, suspends, or removes Standard Instrument Approach Procedures (SIAPs) and associated Takeoff Minimums and Obstacle Departure Procedures for operations at certain airports. These regulatory actions are needed because of the adoption of new or revised criteria, or because of changes occurring in the National Airspace System, such as the commissioning of new navigational facilities, adding new obstacles, or changing air traffic requirements. These changes are designed to provide for the safe and efficient use of the navigable airspace and to promote safe flight operations under instrument flight rules at the affected airports.

DATES: This rule is effective May 12, 2020. The compliance date for each SIAP, associated Takeoff Minimums, and ODP is specified in the amendatory provisions.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 12, 2020.

ADDRESSES: Availability of matter incorporated by reference in the amendment is as follows:

For Examination

1. U.S. Department of Transportation, Docket Ops-M30, 1200 New Jersey Avenue SE, West Bldg., Ground Floor, Washington, DC 20590–0001;

2. The FAA Air Traffic Organization Service Area in which the affected airport is located;

3. The office of Aeronautical Navigation Products, 6500 South MacArthur Blvd., Oklahoma City, OK 73169 or,

4. The National Archives and Records Administration (NARA).

For information on the availability of this material at NARA, email *fedreg.legal@nara.gov* or go to: *https://www.archives.gov/federal-register/cfr/ibr-locations.html*.

Availability

All SIAPs and Takeoff Minimums and ODPs are available online free of charge. Visit the National Flight Data Center online at *nfdc.faa.gov* to register. Additionally, individual SIAP and Takeoff Minimums and ODP copies may be obtained from the FAA Air Traffic Organization Service Area in which the affected airport is located.

FOR FURTHER INFORMATION CONTACT: Thomas J. Nichols, Flight Procedures and Airspace Group, Flight Technologies and Procedures Division, Flight Standards Service, Federal Aviation Administration. Mailing Address: FAA Mike Monroney Aeronautical Center, Flight Procedures and Airspace Group, 6500 South MacArthur Blvd., Registry Bldg 29 Room 104, Oklahoma City, OK 73169. Telephone: (405) 954–4164.

SUPPLEMENTARY INFORMATION:

This rule amends Title 14, Code of Federal Regulations, Part 97 (14 CFR part 97) by amending the referenced SIAPs. The complete regulatory description of each SIAP is listed on the appropriate FAA Form 8260, as modified by the National Flight Data Center (NFDC)/Permanent Notice to Airmen (P- NOTAM), and is incorporated by reference under 5 U.S.C. 552(a), 1 CFR part 51, and 14 CFR 97.20. The large number of SIAPs, their complex nature, and the need for a special format make their verbatim publication in the **Federal Register** expensive and impractical. Further, airmen do not use the regulatory text of the SIAPs, but refer to their graphic depiction on charts printed by publishers of aeronautical materials. Thus, the advantages of incorporation by reference are realized and publication of the complete description of each SIAP contained on FAA form documents is unnecessary. This amendment provides the affected CFR sections, and specifies the SIAPs and Takeoff Minimums and ODPs with their applicable effective dates. This amendment also identifies the airport and its location, the procedure and the amendment number.

Availability and Summary of Material Incorporated by Reference

The material incorporated by reference is publicly available as listed in the **ADDRESSES** section.

The material incorporated by reference describes SIAPs, Takeoff Minimums and ODPs as identified in the amendatory language for part 97 of this final rule.

The Rule

This amendment to 14 CFR part 97 is effective upon publication of each separate SIAP and Takeoff Minimums and ODP as amended in the transmittal. For safety and timeliness of change considerations, this amendment incorporates only specific changes contained for each SIAP and Takeoff Minimums and ODP as modified by FDC permanent NOTAMs.

The SIAPs and Takeoff Minimums and ODPs, as modified by FDC permanent NOTAM, and contained in this amendment are based on the criteria contained in the U.S. Standard for Terminal Instrument Procedures (TERPS). In developing these changes to SIAPs and Takeoff Minimums and ODPs, the TERPS criteria were applied only to specific conditions existing at the affected airports. All SIAP amendments in this rule have been previously issued by the FAA in a FDC NOTAM as an emergency action of immediate flight safety relating directly to published aeronautical charts.

The circumstances that created the need for these SIAP and Takeoff Minimums and ODP amendments require making them effective in less than 30 days.

Because of the close and immediate relationship between these SIAPs, Takeoff Minimums and ODPs, and safety in air commerce, I find that notice and public procedure under 5 U.S.C. 553(b) are impracticable and contrary to the public interest and, where applicable, under 5 U.S.C. 553(d), good cause exists for making these SIAPs effective in less than 30 days.

The FAA has determined that this regulation only involves an established body of technical regulations for which frequent and routine amendments are necessary to keep them operationally current. It, therefore—(1) is not a ''significant regulatory action'' under Executive Order 12866; (2) is not a ''significant rule'' under DOT regulatory Policies and Procedures (44 FR 11034; February 26, 1979); and (3) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal.

For the same reason, the FAA certifies that this amendment will not have a

significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 97

Air Traffic Control, Airports, Incorporation by reference, Navigation (Air).

Issued in Washington, DC, on May 1, 2020.

Robert C. Carty,

Executive Deputy Director, Flight Standards Service.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me, Title 14, Code of Federal regulations, Part 97 (14 CFR part 97), is amended by amending Standard Instrument Approach Procedures and Takeoff Minimums and ODPs, effective at 0901 UTC on the dates specified, as follows:

PART 97—STANDARD INSTRUMENT APPROACH PROCEDURES

■ 1. The authority citation for part 97 continues to read as follows:

Authority: 49 U.S.C. 106(f), 106(g), 40103, 40106, 40113, 40114, 40120, 44502, 44514, 44701, 44719, 44721–44722.

§§ 97.23, 97.25, 97.27, 97.29, 97.31, 97.33, 97.35 [AMENDED]

■ 2. Part 97 is amended to read as follows:

By amending: § 97.23 VOR, VOR/DME, VOR or TACAN, and VOR/DME or TACAN; § 97.25 LOC, LOC/DME, LDA, LDA/DME, SDF, SDF/DME; § 97.27 NDB, NDB/DME; § 97.29 ILS, ILS/DME, MLS, MLS/DME, MLS/RNAV; § 97.31 RADAR SIAPs; § 97.33 RNAV SIAPs; and § 97.35 COPTER SIAPs, Identified as follows:

Effective Upon Publication

AIRAC date	State	City	Airport	FDC No.	FDC date	Subject
18-Jun-20	MN	Benson	Benson Muni	0/2106	3/18/20	NDB RWY 14, Amdt 7A.
18-Jun-20	MN	Marshall	Southwest Minnesota Rgnl Marshall/Ryan Fld.	0/2189	4/20/20	VOR RWY 12, Amdt 8A.
18-Jun-20	TX	Fort Worth	Fort Worth Meacham Intl	0/2754	4/17/20	ILS OR LOC RWY 34, Amdt 2.
18-Jun-20	OK	Bartlesville	Bartlesville Muni	0/2757	4/17/20	VOR/DME RWY 35, Amdt 6.
18-Jun-20	AR	Fayetteville	Drake Field	0/2787	4/17/20	RNAV (GPS) RWY 16, Amdt 1A.
18-Jun-20	AR	Fayetteville	Drake Field	0/2788	4/17/20	RNAV (GPS) RWY 34, Amdt 1B.
18-Jun-20	NY	Niagara Falls	Niagara Falls Intl	0/2800	4/14/20	NDB RWY 28R, Amdt 17A.
18-Jun-20	NY	Niagara Falls	Niagara Falls Intl	0/2802	4/14/20	RNAV (GPS) Z RWY 24, Orig-A.
18-Jun-20	NY	Niagara Falls	Niagara Falls Intl	0/2804	4/14/20	RNAV (GPS) Y RWY 24, Orig-A.
18-Jun-20	NY	Niagara Falls	Niagara Falls Intl	0/2805	4/14/20	RNAV (GPS) RWY 28R, Orig-A.
18-Jun-20	NY	Niagara Falls	Niagara Falls Intl	0/2806	4/14/20	RNAV (GPS) RWY 6, Orig-A.
18-Jun-20	FL	Fort Pierce	Treasure Coast Intl	0/2807	4/14/20	RNAV (GPS) RWY 14, Amdt 2B.
18-Jun-20	FL	Fort Pierce	Treasure Coast Intl	0/2808	4/14/20	RNAV (GPS) RWY 28L, Amdt 1B.
18-Jun-20	NY	Niagara Falls	Niagara Falls Intl	0/2809	4/14/20	ILS Y OR LOC Y RWY 28R, Amdt 23A.
18-Jun-20	FL	Fort Pierce	Treasure Coast Intl	0/2810	4/14/20	RNAV (GPS) RWY 32, Amdt 1C.
18-Jun-20	FL	Fort Pierce	Treasure Coast Intl	0/2811	4/14/20	VOR/DME RWY 14, Amdt 9C.
18-Jun-20	NY	Niagara Falls	Niagara Falls Intl	0/2812	4/14/20	ILS Z OR LOC Z RWY 28R, Amdt 4A.
18-Jun-20	NV	Las Vegas	North Las Vegas	0/3210	4/14/20	ILS OR LOC RWY 12L, Orig-D.
18-Jun-20	PA	Hazleton	Hazleton Rgnl	0/3220	4/9/20	RNAV (GPS) RWY 10, Amdt 3.
18-Jun-20	IL	Greenville	Greenville	0/3778	4/10/20	RNAV (GPS) RWY 36, Orig.
18-Jun-20	MI	Owosso	Owosso Community	0/4542	4/17/20	VOR/DME RWY 29, Amdt 1D.
18-Jun-20	MI	Owosso	Owosso Community	0/4543	4/17/20	RNAV (GPS) RWY 11, Amdt 1E.
18-Jun-20	NE	Hastings	Hastings Muni	0/4556	4/17/20	RNAV (GPS) RWY 4.Orig-A.
18-Jun-20	NE	Hastings	Hastings Muni	0/4557	4/17/20	RNAV (GPS) RWY 14, Orig-C.
18-Jun-20	NE	Hastings	Hastings Muni	0/4558	4/17/20	RNAV (GPS) RWY 32, Orig-B.
18-Jun-20	OK	Durant	Durant Rgnl—Eaker Field	0/4651	4/17/20	RNAV (GPS) RWY 35, Amdt 2.
18-Jun-20	IN	Muncie	Delaware County Rgnl	0/4656	4/17/20	RNAV (GPS) RWY 14, Orig-B.
18-Jun-20	IN	Muncie	Delaware County Rgnl	0/4658	4/17/20	VOR RWY 14, Amdt 17A.

AIRAC date	State	City	Airport	FDC No.	FDC date	Subject
18-Jun-20	OK	Duncan	Halliburton Field	0/4845	4/17/20	RNAV (GPS) RWY 17, Amdt 2.
18-Jun-20	OK	Duncan	Halliburton Field	0/4846	4/17/20	RNAV (GPS) RWY 35, Amdt 2A.
18-Jun-20	SC	Greenville	Greenville Downtown	0/5525	4/22/20	RNAV (GPS) RWY 1, Orig-C.
18-Jun-20	SC	Greenville	Greenville Downtown	0/5526	4/22/20	NDB RWY 1, Amdt 22C.
18-Jun-20	OH	Columbus	Ohio State University	0/5532	4/21/20	RNAV (GPS) RWY 27L, Orig-A.
18-Jun-20	OH	Columbus	Ohio State University	0/5533	4/21/20	RNAV (GPS) RWY 9R, Amdt 1A.
18-Jun-20	OH	Columbus	Ohio State University	0/5534	4/21/20	ILS OR LOC RWY 9R, Amdt 5A.
18-Jun-20	OH	Columbus	Ohio State University	0/5535	4/21/20	NDB RWY 9R, Amdt 3A.
18-Jun-20	WY	Hulett	Hulett Muni	0/5954	4/24/20	RNAV (GPS) RWY 13, Orig.
18-Jun-20	WY	Hulett	Hulett Muni	0/5955	4/24/20	RNAV (GPS)-A, Amdt 1.
18-Jun-20	MT	Plentywood	Sher-Wood	0/6195	4/24/20	RNAV (GPS) RWY 12, Orig-B.
18-Jun-20	MT	Plentywood	Sher-Wood	0/6196	4/24/20	RNAV (GPS) RWY 30, Orig-B.
18-Jun-20	GA	Reidsville	Swinton Smith Fld At Reidsville Muni.	0/6247	4/24/20	RNAV (GPS) RWY 11, Amdt 1A.
18-Jun-20	NJ	Pittstown	Sky Manor	0/6255	4/24/20	RNAV (GPS) RWY 7, Amdt 1A.
18-Jun-20	NJ	Pittstown	Sky Manor	0/6256	4/24/20	RNAV (GPS) RWY 25, Orig-B.
18-Jun-20	NJ	Pittstown	Sky Manor	0/6257	4/24/20	VOR RWY 7, Amdt 3B.
18-Jun-20	IN	Muncie	Delaware County Rgnl	0/6957	4/27/20	VOR RWY 21, Amdt 14.
18-Jun-20	IA	Belle Plaine	Belle Plaine Muni	0/7297	3/18/20	VOR–A, Amdt 1A.
18-Jun-20	IL	Rochelle	Rochelle Muni Airport-Koritz Field.	0/7299	3/18/20	VOR–A, Amdt 8A.
18-Jun-20	WA	Yakima	Yakima Air Terminal/ Mcallister Field.	0/7314	4/13/20	LOC/DME BC–B, Amdt 3.
18-Jun-20	WA	Yakima	Yakima Air Terminal/ Mcallister Field.	0/7315	4/13/20	VOR–A, Amdt 7.
18-Jun-20	WA	Yakima	Yakima Air Terminal/ Mcallister Field.	0/7316	4/13/20	VOR/DME OR TACAN RWY 27, Amdt 8A.

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DEPARTMENT OF DEFENSE

Office of the Secretary

32 CFR Part 199

[Docket ID: DOD–2020–HA–0040]

RIN 0720–AB81

TRICARE Coverage and Payment for Certain Services in Response to the COVID–19 Pandemic

AGENCY: Office of the Secretary, Department of Defense.

ACTION: Interim final rule with request for comments.

SUMMARY: The Assistant Secretary of Defense for Health Affairs (ASD(HA)) issues this interim final rule with comment to: Provide an exception to the prohibition on telephone, audio-only telehealth services; to authorize reimbursement for interstate or international practice by TRICARE-authorized providers when such authority is consistent with governing state, federal, or host nation licensing requirements; and to eliminate copayments and cost-shares for telehealth services. The changes in this rule will be effective for the period of the coronavirus 2019 (COVID–19) pandemic. These changes will reduce the spread of COVID–19 among TRICARE beneficiaries by incentivizing use of telehealth services, and will aid providers in caring for TRICARE beneficiaries by temporarily waiving some licensure requirements.

DATES: *Effective date:* This interim final rule is effective on May 12, 2020 through the end of the President's national emergency (Proclamation 9994 of March 13, 2020 (85 FR 15337)) . ASD(HA) will publish a document announcing the expiration date. See the **SUPPLEMENTARY INFORMATION** section for more information.

Comment date: Comments are invited and must be submitted on or before June 11, 2020.

ADDRESSES: You may submit comments, identified by docket number and/or Regulation Identification Number (RIN) number and title, by any of the following methods:

- *Federal Rulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Mail:* DoD cannot receive written comments at this time due to the COVID–19 pandemic. Comments should be sent electronically to the docket listed above.

Instructions: All submissions received must include the agency name and docket number or RIN for this **Federal Register** document. The general policy for comments and other submissions from members of the public is to make these submissions available for public viewing on the internet at *http://www.regulations.gov* as they are received without change, including any personal identifiers or contact information.

FOR FURTHER INFORMATION CONTACT: Major Zachary Rumery, Defense Health Agency, 703–681–0053, *zachary.r.rumery.mil@mail.mil;* Amber Butterfield, Defense Health Agency, 303–676–3565,

amber.l.butterfield.civ@mail.mil; Erica Ferron, Defense Health Agency, 303–676–3626, *erica.c.ferron.civ@mail.mil.*

SUPPLEMENTARY INFORMATION:

Expiration Date of the Interim Final Rule

Unless extended after consideration of submitted comments, this interim final rule will cease to be in effect upon termination of the President's declared national emergency, in accordance with applicable law and regulation (*e.g.,* 50 U.S.C. 1622(a)). Because TRICARE operates both in the United States and in overseas locations, the ASD(HA), or designee, may determine that it is appropriate to continue exemptions to permanent regulation provisions for some or all of TRICARE's overseas locations serviced by the TRICARE Overseas Program contractor under 32 CFR 199.1(b) beyond termination of the President's declared national emergency based on the status of COVID–19 community spread in those locations. Such continuation of these provisions for overseas locations will be published in TRICARE's implementing instructions (TRICARE manuals), available at *http://manuals.health.mil.*

If the ASD(HA) determines it would be appropriate to make these changes permanent, the ASD(HA) will follow-up with final rulemaking.

I. Executive Summary

A. Purpose of the Interim Final Rule

A novel coronavirus (SARS-CoV–2), which causes Coronavirus Disease 2019 (COVID–19), was first detected in December 2019 and has spread rapidly throughout the world. On January 31, 2020, the Secretary of Health and Human Services determined that a public health emergency existed since 27 January, 2020.[1] On March 13, 2020, the President declared a national emergency due to COVID–19. Proclamation 9994 of March 13, 2020, titled ''Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID–19) Outbreak'' published in the **Federal Register** on March 18, 2020 (85 FR 15337–15338). This proclamation is available at *https://www.govinfo.gov/content/pkg/FR-2020-03-18/pdf/2020-05794.pdf.* According to WHO data on March 25, 2020, there were 416,686 cases of COVID–19 worldwide (18,589 deaths), with 51,914 in the United States (673 deaths), with the number of cases rapidly expanding each day. Medical experts from the National Institute of Allergy and Infectious Disease anticipate more cases in the United States and overseas in the coming months.[2]

In light of the rapid spread of COVID–19, the Centers for Disease Control and Prevention (CDC) has urged Americans to work and engage in schooling from home whenever possible as well as to avoid congregating in groups. Various States (*e.g.,* Washington, New York) and various cities (*e.g.,* Los Angeles) have imposed more rigid restrictions on gatherings requiring many businesses to restrict or close their operations, all to prevent further spread of the disease.

Pursuant to the President's emergency declaration and as a result of the worldwide COVID–19 pandemic, the ASD(HA) hereby modifies the following regulations, but in each case, only to the extent necessary, as determined by the Director, Defense Health Agency (DHA), to encourage social distancing and prevent the spread of COVID–19 by incentivizing the use of telehealth services, and to allow TRICARE-authorized providers to care for TRICARE beneficiaries wherever there is need as a result of the consequences of the COVID–19 pandemic. The following regulations are temporarily modified:

a. *32 CFR 199.4(g)(52) Telephone Services:* Existing regulations exclude TRICARE coverage of telephone services (audio-only) except for biotelemetry. Given the current CDC guidelines for social distancing and some states' governors' orders for residents to stay at home, it is imperative that an exception to the regulatory exclusion be permitted to allow TRICARE-authorized providers to render medically necessary care and treatment to beneficiaries over the telephone, when in-person treatment is not required. Telephone calls of an administrative nature (*e.g.,* appointment scheduling) are not medical services and are not reimbursable. The exception to the exclusion is warranted now during the COVID–19 pandemic and the DoD may follow up with final rulemaking to make the removal of the exclusion a permanent change in Program regulations, if appropriate, after a thorough review of costs, benefits, risks, patient privacy, and other considerations. However, while the DoD conducts this review, it is prudent to permit telephone services more expansively during this emergency period. This change will apply to all geographic areas where TRICARE beneficiaries reside.

b. *32 CFR 199.6(c)(2) Conditions of authorization—(i) Professional license requirement:* Existing regulations require TRICARE-authorized providers to be licensed in the state where practicing, even if such a license is optional. Anticipating that practitioners may be asked to surge to areas of high medical need, the federal government (through the Department of Health and Human Services (HHS)) and some states (*e.g.,* California, Florida, Louisiana) have proposed suspending interstate license requirements or otherwise making it easier for providers to treat patients beyond the state where the provider holds a license. If the federal or state government permits providers to operate within a jurisdiction without obtaining a license in that state, TRICARE would be unable to cost-share services provided to in-state beneficiaries by out-of-state licensed providers due to the existing regulatory licensure requirements. For telehealth, the provider license requirement has long been interpreted to mean that the provider must be licensed in the state where practicing and in the state where the beneficiary resides. This regulation change would allow for reimbursement of an otherwise-authorized TRICARE provider if, under applicable federal or state law, that individual holds an equivalent license from any state in the United States, complies with any provisions for interstate practice in that state, and is not affirmatively barred or restricted from practicing in any state in the United States. This change does not supplant state authority to regulate licensure, but assures that if licensure requirements are relaxed by any state or the federal government during the period of the COVID–19 pandemic, that providers caring for TRICARE beneficiaries in compliance with state or federal law will be eligible for reimbursement under TRICARE.

Implementing this regulatory change resolves an issue of particular concern where TRICARE has military installations near the border between states and patients may have their primary care or other regular provider based in another state (*e.g.,* the patient lives in Kentucky but sees a mental health professional in Virginia). Without this change, the provider would not be able to be reimbursed for services provided to that beneficiary via telehealth unless the provider was also licensed in the adjoining state.

Services provided to TRICARE beneficiaries overseas would be eligible for reimbursement when performed by a provider outside of the nation in which they are licensed and normally practice if allowed by the host country in which

[1] *https://www.phe.gov/emergency/news/healthactions/phe/Pages/2019-nCoV.aspx.*

[2] *https://www.niaid.nih.gov/news-events/covid-19-reminder-challenge-emerging-infectious-diseases.*

they are practicing and so long as they hold an equivalent licensure in the nation in which they normally provide services. The provider would be required to meet all requirements for practice under the host nation.

Providers listed on the HHS sanction list are ineligible to receive reimbursement under the TRICARE program, and would remain ineligible under this provision.

c. *32 CFR 199.17(l)(3) Special cost-sharing rules:* Existing regulations require copayments and cost-sharing for telehealth services to be the same as if the service was provided in person. TRICARE's cost-shares and copayments are set by law. However, Section 718(d) of the National Defense Authorization Act of 2017 authorized the Secretary of Defense to reduce or eliminate copayments or cost-shares when deemed appropriate for covered beneficiaries in connection with the receipt of telehealth services under TRICARE. Given the current environment where community-spread of COVID–19 is evident and the CDC has recommended social distancing, we find it appropriate to remove copayments and cost-shares for TRICARE Prime and Select beneficiaries utilizing telehealth services provided by network providers as a necessary incentive to prevent further spread of COVID–19 during this emergency. The waiving of copayments and cost-shares (including deductibles) for in-network telehealth services will apply to all otherwise-covered services delivered via telehealth, not just those related to COVID–19, and will apply to all TRICARE beneficiaries in all geographic regions for the duration of this emergency. TRICARE program rules still apply, for example, TRICARE Prime beneficiaries must have a referral from their Primary Care Manager (PCM) for a specialty care visit, however, under this rule modification, both the PCM visit and the specialty care visit (if performed via in-network telehealth) have no cost-share or copay. There are no changes to cost-shares and copays for ancillary services, durable medical equipment, prescriptions, or other referrals or care that are ordered due to or result from the telehealth service.

d. *Dates:* These modifications will become effective on May 12, 2020 and will cease to be in effect upon termination of the President's declared national emergency. With TRICARE beneficiaries located worldwide, the ASD(HA), or designee, may allow the provisions of this interim final rule (IFR) to continue after termination of the President's national emergency for some or all of TRICARE's overseas locations based on the status of COVID–19 community transmission in those locations. Such continuation of these provisions for overseas locations will be published in TRICARE's implementing instructions (TRICARE manuals), available at *http://manuals.health.mil.*

Certain provisions of this IFR may be made permanent (*e.g.,* the elimination of the audio-only telehealth exclusion) while others are anticipated to be removed when the COVID–19 pandemic has concluded (*e.g.,* waiver of telehealth cost-shares and licensure of authorized providers). The DoD may issue a final rule to make permanent changes.

B. Interim Final Rule Justification

Agency rulemaking is governed by section 553 of the Administrative Procedure Act (APA), 5 U.S.C. 551 *et seq..* Section 553(b) requires that, unless the rule falls within one of the enumerated exemptions, the DoD must publish a notice of proposed rulemaking in the **Federal Register** that provides interested persons an opportunity to submit written data, views, or arguments, prior to finalization of regulatory requirements. Section 553(b)(B) of the APA authorizes a department or agency to dispense with the prior notice and opportunity for public comment requirement when the agency, for ''good cause,'' finds that notice and public comment thereon are impracticable, unnecessary, or contrary to the public interest. Section 553(d)(3) requires that an agency must include an explanation of such good cause with the publication of the new rule.

As noted in this preamble, the United States, as well as numerous other countries, have taken unprecedented measures to try to contain or slow the spread of COVID–19. The CDC has recommended that individuals remain at home unless their occupations are essential, *e.g.,* health care workers, and various states and locales have instituted more stringent requirements discouraging travel. As a result, ensuring that patients receive testing and care as warranted will require robust telehealth (including audio-only services) and coverage of providers rendering services in different locations from where they are licensed.

Given the national emergency caused by COVID–19, it would be impracticable and contrary to the public health—and, by extension, the public interest—to delay these implementing regulations until a full public notice-and-comment process is completed.

Pursuant to 5 U.S.C. 553(b)(B), and for the reasons stated in this preamble, the ASD(HA), therefore, concludes that there is good cause to dispense with prior public notice and the opportunity to comment on this rule before finalizing this rule. For the same reasons, the ASD(HA) has determined, consistent with section 553(d) of the APA, that there is good cause to make this IFR effective immediately upon publication in the **Federal Register**.

C. Summary of Major Provisions of the Interim Final Rule

This provision, 32 CFR 199.4(g)(52) currently excludes telephone services when they are audio-only. However, biotelemetry for patient monitoring and synchronous two-way audio interactions that are enhanced with video or similar kinds of data transmissions are covered under the TRICARE Program. This IFR temporarily revises the regulation to provide an exception to the prohibition for telephonic services (audio-only) for the duration of the COVID–19 pandemic. The exception to the prohibition is warranted now during the pandemic to permit beneficiaries to have their symptoms (which include COVID–19 symptoms, or symptoms of other covered illness or injury) evaluated by a provider over the telephone before, or in lieu of, obtaining an in-person appointment; which may ultimately not be necessary. This practice supports containment of the disease and decreases the opportunity for exposing others.

Consistent with existing TRICARE policy, all audio-only telehealth encounters must be medically necessary, appropriate, and be rendered by a TRICARE-authorized provider acting within the scope of their licensure, as defined by TRICARE statute, regulation, and policy. This regulatory modification does not expand the services available to TRICARE beneficiaries; instead, it makes otherwise-covered services, when rendered via telephone (audio-only), eligible for reimbursement and cost-sharing when care is medically necessary and appropriate, and meets all other provisions of TRICARE policy. While existing telehealth platforms that incorporate both audio and video/visual two-way communication is preferred, there may be instances when this is not possible within the context of this public health emergency. For example, a rural provider may not have access to broadband capability, or a beneficiary may not have in-home technology to support two-way audio/video communication. For the purposes of this public health emergency, and to support clinical guidelines regarding social distancing, audio-only visits (if appropriate) are an acceptable

alternative to other, preferred, telehealth platforms. The rendering provider will be expected to utilize their judgment of clinical necessity, within their licensure and scope of practice, to differentiate services provided via audio and video (traditional telehealth platforms) or audio-only services. The use of audio-only telehealth should be for the purpose of providing assessment, diagnosis, clinical care, or formal patient education from an authorized provider to a patient, or for providing clinical consultation between providers that directly impacts upon a particular patient's care. The authorized provider should determine that a phone call is appropriate for accomplishing the clinical goals of the encounter and document appropriately. If the decision to provide care via a traditional audio/visual method is chosen, the reasons for that decision should be documented as well. For recurring care, the rationale for choosing audio-only or audio and visual should be documented only at the initiation of remote care, or upon any change in modality.

Care that normally requires a physical examination (including a remote physical examination requiring a tele-presenter such as a nurse) is not appropriate for audio-only telehealth encounters. Administrative services (for example, making appointments or verifying prescriptions) are not separately reimbursed services. Following publication of this IFR, the agency will provide additional parameters and policy regarding audio-only telehealth encounters in the implementing instructions consistent with this IFR and other provisions of TRICARE policy.

The Agency may follow up with final rulemaking to make the removal of the exclusion for telephonic services (audio-only) a permanent change in Program regulation, if appropriate, after a thorough review of costs, benefits, risks, patient privacy, and other considerations. However, while the agency conducts this review, it is prudent to permit telephone services more expansively during this emergency period. This temporary change will apply to all geographic areas where TRICARE beneficiaries reside.

This provision, 32 CFR 199.6(c)(2)(i), requires providers to be licensed in the state in which they practice when such a license is offered, even if such a license is not required. The requirement has not changed over the years; however, the global pandemic has created a situation where flexibility is required in order to allow providers to (1) deliver care in areas of need without the additional time and cost of re-licensure, when permitted by state and federal law, and (2) provide services via telehealth to beneficiaries wherever they are located. This temporary rule change will make it easier for TRICARE beneficiaries to access telehealth services, and will ensure providers are able to treat beneficiaries in areas of high need without worrying about not being reimbursed for doing so. Nothing in TRICARE's provision supplants the authority of states to manage the licensing of providers in their jurisdictions, and this modification would only apply in those areas that have opted to relax interstate licensing requirements or where the Federal Government has preempted state licensing requirements. In doing so, it would ensure that providers continue to be reimbursed during the highly-fluid global pandemic. It will still require providers to have an equivalent license in any state, to meet the requirements for the state where they are practicing, and forbid reimbursement of services by a provider who is affirmatively barred or restricted from practice in any state.

This modification would also apply to providers treating beneficiaries outside of the United States by allowing the provider to practice in a nation other than the one in which they are licensed and normally provide services so long as the host nation permits such practice and the provider is not on the HHS sanctions list. The ability of the provider to practice in the host nation remains the province of the host nation; this modification would ensure that services provided within the licensure requirements of the host nation would be reimbursable under TRICARE.

This provision, 32 CFR 199.17(l)(3), delineates requirements for cost-shares and copayments under the TRICARE program. This IFR would amend the regulation to add a new provision waiving cost-shares and copayments (including deductibles) for all in-network authorized telehealth services for the duration of the COVID–19 pandemic (ending when the President's state of emergency declaration is suspended or terminated, in accordance with applicable law and regulation). This will incentivize TRICARE beneficiaries to utilize telehealth services and avoid unnecessary in-person TRICARE-authorized provider visits, which could potentially bring them into contact with or inadvertently aid in the spread of COVID–19. This will apply to TRICARE Prime and Select beneficiaries in all geographic areas.

D. Legal Authority for This Program

This rule is issued under 10 U.S.C. 1073(a)(2) giving authority and responsibility to the Secretary of Defense to administer the TRICARE program. The text of 10 U.S.C. chapter 55 can be found at *https://manuals.health.mil/.*

II. Regulatory History

Each of the sections being modified by this rule are revised every few years to ensure requirements continue to align with the evolving health care field. Title 32 CFR Section 199.4 was most recently updated on September 29, 2017, with an IFR (82 **Federal Register** (FR) 45438) that implemented the Congressionally-mandated TRICARE Select benefit plan. Its revision to 32 CFR 199.4 included the addition of medically necessary foods as a benefit under the TRICARE Basic Program. No revisions have been made to the telehealth services paragraph being revised by this IFR, § 199.4(g)(52), in at least 20 years.

The most recent update to 32 CFR 199.6 was on March 17, 2020 (85 FR 15061), which added physical therapist assistants and occupational therapy assistants as TRICARE-authorized providers. Six hundred eighty-one comments, none of which were substantial, were received on the proposed rule associated with that change, and all were resolved in the final rule. The particular provision being modified by this IFR regarding provider licensure, Section 199.6(c)(2)(i) is a long-standing requirement of the TRICARE program, and has not been revised in over 20 years.

Title 32 CFR Section 199.17 was last revised on February 15, 2019 (84 FR 4333), as part of the final rule implementing the TRICARE Select benefit plan. The revisions to Section 199.17 included adding high-value services as a benefit under the TRICARE program, as well as copayment requirements for Group B beneficiaries. The 32 CFR 199.17(l) paragraph being modified by this IFR was created as part of the IFR that established the TRICARE Select benefit (82 FR 45438) during which a comprehensive revision of Section 199.17 occurred. This paragraph did not exist prior to that revision and has not been modified since.

III. Regulatory Analysis

A. Regulatory Planning and Review

a. Executive Orders

Executive Order 12866, ''Regulatory Planning and Review'' and Executive Order 13563, ''Improving Regulation and Regulatory Review''

Executive Orders 13563 and 12866 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). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. Accordingly, the rule has been reviewed by the Office of Management and Budget (OMB) under the requirements of these Executive Orders. This rule has been designated a ''significant regulatory action,'' and determined to be not economically significant, under section 3(f) of Executive Order 12866. This rule is not expected to have a significant impact on the economy; however, the urgency of the change due to the global pandemic makes it a significant regulatory action.

b. Summary

The modifications to Section 199.4(g)(52) in this IFR will allow TRICARE beneficiaries to obtain telephonic (audio) office visits with TRICARE-authorized providers for otherwise-covered, medically necessary care and treatment and allow reimbursement to those providers during the COVID–19 pandemic. It provides an exception to the regulatory exclusion prohibiting audio-only telephone services.

The modifications to Section 199.6(c)(2)(i) in this IFR will allow providers to be reimbursed for interstate practice, both in person and via telehealth, during the global pandemic so long as the provider meets the requirements for practicing in that state or under federal law. It removes the requirement that the provider must be licensed in the state where practicing, even if that license is optional. For providers overseas, this will allow providers, both in person and via telehealth, to practice outside of the nation where licensed when permitted by the host nation.

The modifications to Section 199.17(l)(3) will remove cost-shares and copayments for telehealth services for TRICARE Prime and Select beneficiaries utilizing telehealth services with an in-network, TRICARE-authorized provider during the global pandemic. It adds in-network telehealth services as a special cost-sharing rule to waive the beneficiary copay.

c. Affected Population

This rule impacts all 9.5 million TRICARE beneficiaries, TRICARE-authorized providers, the TRICARE Program, and its contractors, both in the United States and overseas. TRICARE beneficiaries will be impacted through increased access to telehealth services and to providers who might surge to help with areas of high medical need. Providers will be impacted by being able to provide services in any state or nation that allows them to do so without risking loss of reimbursement for those services. TRICARE's health care contractors will be impacted by being required to implement the provisions of this regulatory change. While states will not be directly impacted by this change, this change will support efforts by states to ensure enough providers are available to provide services to TRICARE beneficiaries within their jurisdictions when those states relax licensing requirements for interstate practice.

d. Costs

The cost estimates related to the changes discussed in this IFR include health care and administrative costs to the government and beneficiary cost impact. The duration of the COVID–19 emergency is uncertain, therefore estimated three-, six-, and nine-month scenarios for the impact of this IFR are presented.

Health Care Costs Associated With Removing Copays for Telehealth

There are three factors that would increase DoD health care costs due to this rule. First, the government would lose cost-sharing revenue paid by beneficiaries on the existing level of telehealth visits. Second, there would be induced demand costs, as removal of patient costs will increase patient demand for these services. Finally, there would be a substitution effect, as the COVID–19 pandemic and removal of telehealth cost-shares would encourage a shift from in-person visits, for which beneficiaries would pay a copay, to telehealth visits, which would be free to beneficiaries. The estimated direct loss of copay revenue is estimated at: $156,949.00 for three-month waiver; $313,897.00 for six months; and $470,846.00 for nine months. The projected induced demand due to zero cost-sharing for telehealth visits, (relative to existing utilization) per 3 months is estimated at $117,772.00. Regarding the estimated cost associated with the substitution effect, see Table 1. Assumed Shifts of Historical Visits from In-Person to Telehealth.

TABLE 1—ASSUMED SHIFTS OF HISTORICAL VISITS FROM IN-PERSON TO TELEHEALTH

	Non-preventive primary care and urgent care (%)	Mental health (%)	Government cost increase
During months 1–3	25	90	$26,673,895
During months 4–6	20	75	21,937,107
During months 7–9	10	67	16,848,793
3-month scenario overall	25	90	26,673,895
6-month scenario overall	23	83	48,611,002
9-month scenario overall	18	77	65,459,795

Administrative Costs

The estimated total contractor start-up administrative costs to implement this change is approximately $67,000. This includes a one-time change to the contractors' claims processing systems and education of network providers.

Combined Health Care and Administrative Costs

Table 2 provides a summary of the combined government health care and administrative costs of the IFR.

TABLE 2—SUMMARY OF GOVERNMENT COSTS OF THE PROPOSED COVID–19 TELEHEALTH IFR

	3-month scenario	6-month scenario	9-month scenario
Government Health care Cost (HC):			
Loss of copays on existing telehealth	$156,949	$313,897	$470,846
Induced demand	117,772	235,544	353,316
Loss of copays on in-person shifting to Telehealth	26,673,895	48,611,002	65,459,795
Subtotal, Government HC cost	26,948,616	49,160,443	66,283,957
Start-up administrative cost	67,494	67,494	67,494
Total Government Cost increase	27,016,110	49,227,937	66,351,451

Beneficiary Cost Impact

There are two types of savings for beneficiaries estimated here. First, beneficiaries would avoid the cost-sharing they otherwise would have paid on existing telehealth visits and on in-person visits that would shift to telehealth. It is estimated the cost-sharing savings to beneficiaries would be: $26,830,844.00 for a three-month scenario; $48,924,899.00 for a six-month scenario; and $65,930,641.00 for a nine-month scenario. Second, for the share of historical visits that is estimated would shift from in-person to telehealth, beneficiaries would avoid travel time and time spent in the provider's waiting room. Two parameters were considered in developing the estimate of the value of time saved for TRICARE beneficiaries: (1) The average amount of time saved per visit, and (2) a monetized estimate of the value of the time saved, based on the opportunity cost of that time. We estimated that beneficiaries would save an average of 60 minutes per visit for avoided travel and time waiting at the provider's office. We converted this average time saved per visit to a monetized value to the beneficiary at $20 per hour as the average after-tax wage rate. See Table 3 Estimated Value to Beneficiaries for the combined results of avoided cost-sharing and dollar value of saved time.

TABLE 3—ESTIMATED VALUE TO BENEFICIARIES

	3-month scenario	6-month scenario	9-month scenario
Avoided cost-sharing	$26,830,844	$48,924,899	$65,930,641
Dollar value of time saved	17,085,995	31,089,668	41,384,466
Total estimated value to beneficiaries	43,916,839	80,014,567	107,315,107

Another important value to beneficiaries that is not feasible to estimate but worth noting is the possibility that shifting visits from in-person to telehealth might reduce the risk of COVID–19 exposure, with all the potential benefits that could accompany that reduced exposure risk. This reduced risk of COVID–19 exposure will likely result in downstream reductions in costs to the TRICARE Program in avoided COVID–19 diagnostics and treatment, although it is also not feasible to estimate these cost savings.

e. Benefits

This change will have a positive impact on beneficiaries by incentivizing the use of telehealth while reducing their cost to do so. This change will have a positive impact on providers, who will be able to serve TRICARE beneficiaries where they are and increase their ability to reach beneficiaries through telehealth. Further, this change will have a positive societal impact by inducing demand for telehealth services and reducing the number of TRICARE beneficiaries seeking in-person health care services and potentially reducing the spread of COVID–19. Finally, though we are unable to quantify, the Department may have some reduced costs due to reduced spread and exposure of TRICARE beneficiaries to COVID–19, partially offsetting some of the costs associated with expansion of benefits and copayment waivers.

f. Alternatives

The DoD considered several alternatives to this IFR. The first alternative involved taking no action. Although this alternative would be the most cost neutral for DHA, it was rejected as not addressing the urgent medical needs of the beneficiary population in response to the COVID–19 pandemic.

The second alternative DoD considered was to only apply the regulatory modifications to COVID–19-related diagnoses. This was rejected because the effects of the COVID–19 pandemic are causing stress on the entire health care system. The regulatory modifications in this IFR will take the pressure off of the health care system by: (1) Covering telephonic office visits with a TRICARE-authorized provider and thereby supporting social distancing recommendations; (2) covering TRICARE-authorized providers practicing across state lines, thereby increasing the overall access to medical care and treatment; and (3) waiving all copayments for in-network telehealth services for TRICARE Prime and Select beneficiaries, thereby removing the potential cost barrier to obtaining medical services remotely and inducing demand for these services, reducing potential person-to-person transmission of COVID–19 during medical appointments.

B. Public Law 96–354, ''Regulatory Flexibility Act'' (5 U.S.C. 601)

The Department of Defense certifies that this IFR is not subject to the Regulatory Flexibility Act (5 U.S.C. 601) because it would not, if promulgated, have a significant economic impact on a substantial number of small entities. Therefore, the Regulatory Flexibility Act, as amended, does not require us to prepare a regulatory flexibility analysis.

C. Congressional Review Act

Pursuant to the Congressional Review Act (5 U.S.C. 801 *et seq.*), the Office of Information and Regulatory Affairs

designated this rule as not a major rule, as defined by 5 U.S.C. 804(2).

D. Sec. 202, Public Law 104–4, ''Unfunded Mandates Reform Act''

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA) (2 U.S.C. 1532) requires agencies to assess anticipated costs and benefits before issuing any rule whose mandates require spending in any one year of $100 million in 1995 dollars, updated annually for inflation. This IFR will not mandate any requirements for State, local, or tribal governments, nor will it affect private sector costs.

E. Public Law 96–511, ''Paperwork Reduction Act'' (44 U.S.C. Chapter 35)

It has been determined that 32 CFR part 199 does not impose reporting or recordkeeping requirements under the Paperwork Reduction Act of 1995.

F. Executive Order 13132, ''Federalism''

Executive Order 13132 establishes certain requirements that an agency must meet when it promulgates 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. This IFR will not have a substantial effect on State and local governments.

List of Subjects in 32 CFR Part 199

Administrative practice and procedure, Claims, Fraud, Health care, Health insurance, Individuals with disabilities, Mental health programs, and Military personnel.

Accordingly, 32 CFR part 199 is amended to read as follows:

PART 199—CIVILIAN HEALTH AND MEDICAL PROGRAM OF THE UNIFORMED SERVICES (CHAMPUS)

■ 1. The authority citation for part 199 continues to read as follows:

Authority: 5 U.S.C. 301; 10 U.S.C. chapter 55.

■ 2. Section 199.4 is amended by revising paragraph (g)(52) to read as follows:

§ 199.4 Basic program benefits.

* * * * *

(g) * * *

(52) *Telephone services.* Services or advice rendered by telephone are excluded, except that: (i) Telephone services (audio-only) are not excluded when otherwise covered TRICARE services are provided to a beneficiary through this modality during the coronavirus 2019 (COVID–19) public health national emergency, if the services are medically necessary and appropriate, and

(ii) A diagnostic or monitoring procedure which incorporates electronic transmission of data or remote detection and measurement of a condition, activity, or function (biotelemetry) is not excluded when:

(A) The procedure without electronic transmission of data or biotelemetry is otherwise an explicit or derived benefit of this section;

(B) The addition of electronic transmission of data or biotelemetry to the procedure is found by the Director, CHAMPUS, or designee, to be medically necessary and appropriate medical care which usually improves the efficiency of the management of a clinical condition in defined circumstances; and

(C) The each data transmission or biotelemetry devices incorporated into a procedure that is otherwise an explicit or derived benefit of this section, has been classified by the U.S. Food and Drug Administration, either separately or as a part of a system, for consistent use with the defined circumstances in paragraph (g)(52)(ii) of this section.

* * * * *

■ 3. Section 199.6 is amended by revising paragraph (c)(2)(i) to read as follows:

§ 199.6 TRICARE-authorized providers.

* * * * *

(c) * * *

(2) * * *

(i) *Professional license requirement.* The individual must be currently licensed to render professional health care services in each state in which the individual renders services to CHAMPUS beneficiaries. Such license is required when a specific state provides, but does not require, license for a specific category of individual professional provider. The license must be at full clinical practice level to meet this requirement. A temporary license at the full clinical practice level is acceptable. During the period of national emergency for the global coronavirus 2019 (COVID–19) pandemic, a license is not required in the United States for each state in which the provider practices, so long as the provider holds an equivalent license in another state, the state in which the provider is practicing permits such practice under its interstate licensing requirements or the state licensing requirements have been preempted by Federal law, and the provider is not affirmatively barred or restricted from practicing in any state. During the COVID–19 pandemic, providers overseas are not required to be licensed in each nation in which the provider operates, so long as the provider holds an equivalent license in another nation, the host nation permits such practice under its licensing requirements, and the provider is not on the Department of Health and Human Services sanction list.

* * * * *

■ 4. Amend § 199.17 by:

■ a. Redesignating paragraph (l)(3)(A) and (B) as (l)(3)(i) and (ii).

■ b. Adding paragraph (l)(3)(iii).

■ c. Redesignating paragraphs (l)(4)(A) and (B) as (l)(4)(i) and (ii).

The addition reads as follows:

§ 199.17 TRICARE program.

* * * * *

(l) * * *

(3) * * *

(iii) Cost-sharing and copayments (including deductibles) shall be waived for in-network telehealth services during the national emergency for the global coronavirus 2019 (COVID–19) pandemic.

* * * * *

Dated: May 6, 2020.

Morgan E. Park,

Alternate OSD Federal Register Liaison Officer, Department of Defense.

[FR Doc. 2020–10042 Filed 5–8–20; 4:15 pm]

BILLING CODE 5001–06–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R01–OAR–2019–0695; FRL–10009–41–Region 1]

Air Plan Approval; Massachusetts; Infrastructure State Implementation Plan Requirements for the 2015 Ozone Standard; Withdrawal of Direct Final Rule

AGENCY: Environmental Protection Agency (EPA).

ACTION: Withdrawal of direct final rule.

SUMMARY: Due to the receipt of an adverse comment, the Environmental Protection Agency (EPA) is withdrawing the March 13, 2020 direct final rule approving a State Implementation Plan (SIP) revision submitted by the Commonwealth of Massachusetts. Massachusetts' SIP revision approved the infrastructure requirements to demonstrate the Commonwealth has the necessary resources to comply with the 2015 ozone National Ambient Air Quality Standard. This action is being taken in accordance with the Clean Air Act.

DATES: The direct final rule published at 85 FR 14578 on March 13, 2020 is withdrawn effective May 12, 2020.

FOR FURTHER INFORMATION CONTACT: Eric Rackauskas, Air and Radiation Division (Mail Code 05–2), U.S. Environmental Protection Agency, Region 1, 5 Post Office Square, Suite 100, Boston, Massachusetts, 02109–3912; (617) 918–1628. *rackauskas.eric@epa.gov.*

SUPPLEMENTARY INFORMATION: In the direct final rule, EPA stated that if adverse comments were submitted by April 13, 2020, the rule would be withdrawn and not take effect. EPA received an adverse comment prior to the close of the comment period and, therefore, is withdrawing the direct final rule. EPA will address the comment in a subsequent final action based upon the proposed rule also published on March 13, 2020 (85 FR 14605). EPA will not institute a second comment period on this action. EPA also received a request for an indefinite extension of the comment period for this action, which we will not be granting, as explained in a memorandum included in the docket for this action.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: May 4, 2020.

Dennis Deziel,

Regional Administrator, EPA Region 1.

PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

■ Accordingly, the amendments to 40 CFR 52.1120 published at 85 FR 14578 on March 13, 2020, are withdrawn effective May 12, 2020.

[FR Doc. 2020–09904 Filed 5–11–20; 8:45 am]

BILLING CODE 6560–50–P

Proposed Rules

Federal Register

Vol. 85, No. 92

Tuesday, May 12, 2020

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 ENERGY

10 CFR Part 431

[EERE–2019–BT–STD–0031]

RIN 1904–AE74

Energy Conservation Program: Energy Conservation Standards for Water-Source Heat Pumps

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Request for information.

SUMMARY: The U.S. Department of Energy (DOE) is initiating an effort to determine whether to amend the current energy conservation standards for water-source heat pumps (WSHPs). This request for information (RFI) solicits information from the public to help DOE determine whether amended standards for WSHPs, a category of covered commercial equipment, would result in significant additional energy savings and whether such standards would be technologically feasible and economically justified. DOE welcomes written comments from the public on any subject within the scope of this document (including those topics not specifically raised in this RFI), as well as the submission of data and other relevant information.

DATES: Written comments and information are requested and will be accepted on or before June 11, 2020.

ADDRESSES: Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at *http://www.regulations.gov.* Follow the instructions for submitting comments. Alternatively, interested persons may submit comments, identified by docket number EERE–2019–BT–STD–0031 and/or RIN 1904–AE74, by any of the following methods:

1. *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.

2. *Email: WaterSourceHP2019STD0031@ee.doe.gov.* Include the docket number EERE–2019–BT–STD–0031 and/or RIN 1904–AE74 in the subject line of the message.

3. *Postal Mail:* Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, Mailstop EE–5B, 1000 Independence Avenue SW, Washington, DC 20585–0121. Telephone: (202) 287–1445. If possible, please submit all items on a compact disc (CD), in which case it is not necessary to include printed copies.

4. *Hand Delivery/Courier:* Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, 950 L'Enfant Plaza SW, 6th Floor, Washington, DC 20024. Telephone: (202) 287–1445. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

No telefacsimilies (faxes) will be accepted. For detailed instructions on submitting comments and additional information on this process, see section III of this document.

Docket: The docket for this activity, which includes **Federal Register** notices, comments, and other supporting documents/materials, is available for review at *http://www.regulations.gov.* All documents in the docket are listed in the *http://www.regulations.gov* index. However, some documents listed in the index, such as those containing information that is exempt from public disclosure, may not be publicly available.

The docket web page can be found at: *http://www.regulations.gov/docket?D=EERE-2019-BT-STD-0031.* The docket web page contains instructions on how to access all documents, including public comments, in the docket. See section III for information on how to submit comments through *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Ms. Catherine Rivest, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE–5B, 1000 Independence Avenue SW, Washington, DC 20585–0121. Telephone: (202) 586–7335. Email: *ApplianceStandardsQuestions@ee.doe.gov.*

Mr. Eric Stas, U.S. Department of Energy, Office of the General Counsel, GC–33, 1000 Independence Avenue SW, Washington, DC 20585–0121. Telephone: (202) 586–5827. Email: *Eric.Stas@hq.doe.gov.*

For further information on how to submit a comment or review other public comments and the docket, contact the Appliance and Equipment Standards Program staff at (202) 287–1445 or by email: *ApplianceStandardsQuestions@ee.doe.gov.*

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I. Introduction

A. Authority and Background

The Energy Policy and Conservation Act, as amended (EPCA),[1] Public Law 94–163 (42 U.S.C. 6291–6317, as codified), authorizes DOE to regulate the energy efficiency of a number of consumer products and certain industrial equipment. Title III, Part C[2] of EPCA (42 U.S.C. 6311–6317, as codified), added by Public Law 95–619, Title IV, section 441(a), established the Energy Conservation Program for Certain Industrial Equipment, which

[1] All references to EPCA in this document refer to the statute as amended through America's Water Infrastructure Act of 2018, Public Law 115–270 (Oct. 23, 2018).

[2] For editorial reasons, upon codification in the U.S. Code, Part C was redesignated Part A–1.

sets forth a variety of provisions designed to improve energy efficiency. This covered equipment includes small, large, and very large commercial package air conditioning and heating equipment. WSHPs, the subject of this RFI, are a category of ''commercial package air conditioning and heating equipment''. (42 U.S.C. 6311(1)(B)-(D)) EPCA prescribed initial standards for this equipment. (42 U.S.C. 6313(a)(1)–(2))

Under EPCA, DOE's energy conservation program consists essentially of four parts: (1) Testing, (2) labeling, (3) Federal energy conservation standards, and (4) certification and enforcement procedures. Relevant provisions of EPCA specifically include definitions (42 U.S.C. 6311), energy conservation standards (42 U.S.C. 6313), test procedures (42 U.S.C. 6314), labeling provisions (42 U.S.C. 6315), and the authority to require information and reports from manufacturers (42 U.S.C. 6316).

Federal energy efficiency requirements for covered equipment established under EPCA generally supersede State laws and regulations concerning energy conservation testing, labeling, and standards. (42 U.S.C. 6316(a)-(b); 42 U.S.C. 6297) DOE may, however, grant waivers of Federal preemption in limited circumstances for particular State laws or regulations, in accordance with the procedures and other provisions set forth under EPCA. (42 U.S.C. 6316(b)(2)(D))

Under EPCA, Congress initially set mandatory energy conservation standards for certain types of commercial heating, air-conditioning, and water-heating equipment. (42 U.S.C. 6313(a)) Specifically, the statute sets standards for small, large, and very large commercial package air conditioning and heating equipment, packaged terminal air conditioners and packaged terminal heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks. *Id.* In doing so, EPCA established Federal energy conservation standards at levels that generally corresponded to the levels in the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings,* as in effect on October 24, 1992 (*i.e.,* ASHRAE Standard 90.1–1989), for each type of covered equipment listed in 42 U.S.C. 6313(a). In acknowledgement of technological changes that yield energy efficiency benefits, Congress further directed DOE through EPCA to consider amending the existing Federal energy conservation standard for each type of covered equipment listed, each time ASHRAE amends Standard 90.1 with respect to such equipment. (42 U.S.C. 6313(a)(6)(A)) When triggered in this manner, DOE must undertake and publish an analysis of the energy savings potential of amended energy efficiency standards, and amend the Federal standards to establish a uniform national standard at the minimum level specified in the amended ASHRAE Standard 90.1, unless DOE determines that there is clear and convincing evidence to support a determination that a more-stringent standard level as a national standard would produce significant additional energy savings and be technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(i)-(ii)) If DOE decides to adopt as a national standard the minimum efficiency levels specified in the amended ASHRAE Standard 90.1, DOE must establish such standard not later than 18 months after publication of the amended industry standard. (42 U.S.C. 6313(a)(6)(A)(ii)(I)) However, if DOE determines, supported by clear and convincing evidence, that a more-stringent uniform national standard would result in significant additional conservation of energy and is technologically feasible and economically justified, then DOE must establish such more-stringent uniform national standard not later than 30 months after publication of the amended ASHRAE Standard 90.1.[3] (42 U.S.C. 6313(a)(6)(A)(ii)(II) and (B))

In those situations where ASHRAE has not acted to amend the levels in Standard 90.1 for the equipment types enumerated in the statute, EPCA also provides for a 6-year-lookback to consider the potential for amending the uniform national standards. (42 U.S.C. 6313(a)(6)(C)) Specifically, pursuant to EPCA, DOE is required to conduct an evaluation of each class of covered equipment in the ASHRAE Standard 90.1 ''every 6 years'' to determine whether the applicable energy conservation standards need to be amended. (42 U.S.C. 6313(a)(6)(C)(i)) DOE must publish either a notice of proposed rulemaking (NOPR) to propose amended standards or a notice of determination that existing standards do not need to be amended. (42 U.S.C. 6313(a)(6)(C)(i)(I)–(II)) In making a determination, DOE must evaluate whether amended standards would result in significant additional conservation of energy and are technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(C)(i)(I); 42 U.S.C. 6313(a)(6)(A)) In proposing new standards under the 6-year-lookback review, DOE must undertake the same considerations as if it were adopting a standard that is more stringent than an amendment to ASHRAE Standard 90.1. (42 U.S.C. 6313(a)(6)(C)(i)(II); 42 U.S.C. 6313(a)(6)(B)) This is a separate statutory review obligation, as differentiated from the obligation triggered by an ASHRAE Standard 90.1 amendment.

While the statute continues to defer to ASHRAE's lead on covered equipment subject to Standard 90.1, it does allow for a comprehensive review of all such equipment and the potential for adopting more-stringent standards, where supported by the requisite clear and convincing evidence. Consistent with that statutory duality, DOE interprets ASHRAE's not amending Standard 90.1 with respect to a product or equipment type as ASHRAE's determination that the standard applicable to that product or equipment type is already at an appropriate level of stringency, and DOE will not amend that standard unless there is clear and convincing evidence that a more stringent level is justified. In those instances where DOE makes a determination that the standards for the equipment in question do not need to be amended, the statute requires the Department to revisit that decision within three years to either make a new determination or propose amended standards. (42 U.S.C. 6313(a)(6)(C)(iii)(II))

On July 17, 2015, DOE published a final rule in the **Federal Register** amending the energy conservation standards for WSHPs in response to the

[3] In determining whether a more-stringent standard is economically justified, EPCA directs DOE to determine, after receiving views and comments from the public, whether the benefits of the proposed standard exceed the burdens of the proposed standard by, to the maximum extent practicable, considering the following:

(1) The economic impact of the standard on the manufacturers and consumers of the products subject to the standard;

(2) The savings in operating costs throughout the estimated average life of the product in the type (or class) compared to any increases in the initial price of, initial charges for, or maintenance expenses of the products that are likely to result from the standard;

(3) The total projected amount of energy savings likely to result directly from the standard;

(4) Any lessening of the utility or the performance of the products likely to result from the standard;

(5) The impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard;

(6) The need for national energy conservation; and

(7) Other factors the Secretary of Energy (Secretary) considers relevant.

(42 U.S.C. 6313(a)(6)(B)(ii))

2013 update to ASHRAE Standard 90.1 (*i.e.,* ASHRAE Standard 90.1–2013). 80 FR 42614 (July 2015 final rule). ASHRAE Standard 90.1–2013 set more-stringent standards for WSHPs. In the July 2015 final rule, DOE adopted the standard levels for WSHPS specified in ASHRAE Standard 90.1–2013. *Id.* Compliance with the amended energy conservation standards for WSHPs was required beginning on October 9, 2015. *Id.* The current energy conservation standards are codified in the Code of Federal Regulations (CFR) at 10 CFR 431.97.

The DOE test procedures for WSHPs are codified at 10 CFR 431.96. The current test procedure incorporates by reference International Organization for Standardization (ISO) Standard 13256–1:1998, *Water-source heat pumps-Testing and rating for performance-Part 1: Water-to-air and brine-to-air heat pumps*'' (ISO 13256–1:1998), and includes additional provisions for equipment set-up at 10 CFR 431.96(e). Paragraph (e) of 10 CFR 431.96 provides specifications for addressing key information typically found in the installation and operation manuals.

ASHRAE Standard 90.1 has been updated since the 2013 version, most recently with the release of the 2019 version (*i.e.,* ASHRAE Standard 90.1–2019) on October 24, 2019. However, the standard levels for WSHPs remain unchanged from the 2013 version.

DOE is publishing this RFI to collect data and information to inform its decision consistent with its obligations under EPCA.

B. Rulemaking Process

As discussed, DOE is required to conduct an evaluation of each class of covered equipment in ASHRAE Standard 90.1 every six years. (42 U.S.C. 6313(a)(6)(C)(i)) In making a determination of whether standards for such equipment need to be amended, DOE must follow specific statutory criteria. DOE must evaluate whether amended Federal standards would result in significant additional conservation of energy and are technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(C)(i)(I) (*referencing* 42 U.S.C. 6313(a)(6)(A)(ii)(II))

On February 14, 2020, DOE published in the **Federal Register** a final rule which updated the procedures, interpretations, and policies that DOE will follow in the consideration and promulgation of new or revised appliance energy conservation standards and test procedures under EPCA. 85 FR 8626; *see also* 10 CFR part 430, subpart C, appendix A (*i.e.,* ''Process Rule''). The Process Rule requires DOE to conduct an early assessment, which includes publishing a notice in the **Federal Register** announcing that DOE is considering a rulemaking proceeding and soliciting the submission of related comments, including data and information on whether DOE should proceed with the rulemaking, including whether any new or amended rule would be cost-effective, economically justified, technologically feasible, or would result in a significant savings of energy. Section 6(a)(1) of the Process Rule. Based on the responses received to the early assessment and DOE's own analysis, DOE will then determine whether to proceed with a rulemaking for a new or amended energy conservation standard or an amended test procedure. *Id.* If DOE determines that a new or amended standard would not satisfy all of the applicable statutory criteria, DOE would engage in a notice and comment rulemaking to issue a determination that a new or amended standard is not warranted. *Id.* If DOE receives sufficient information suggesting it could justify a new or amended standard or the information received is inconclusive with regard to the statutory criteria, DOE would undertake the preliminary stages of a rulemaking to issue or amend an energy conservation standard. Section 6(a)(2) of the Process Rule. In those instances where the early assessment either suggested that a new or amended energy conservation standard might be justified or in which the information was inconclusive on this, DOE will examine the potential costs and benefits and energy savings potential of a new or amended energy conservation standard. Section 6(a)(3) of the Process Rule.

Because ASHRAE equipment is subject to its own unique statutory requirements and timelines, those provisions will generally govern. For example, when triggered by ASHRAE action in amending Standard 90.1, an early assessment is generally not necessary for the triggered equipment classes, because DOE is statutorily bound to adopt those standard levels, unless the agency has clear and convincing evidence to adopt more-stringent levels. However, in other circumstances where the rulemaking for ASHRAE equipment more closely mirrors a typical DOE rulemaking (such as where DOE is considering more-stringent standards or conducting a 6-year-lookback rulemaking), the Department would apply all relevant provisions of the Process Rule. *See* section 9 of the Process Rule; *see also* 85 FR 8626, 8637 (Feb. 14, 2020).

Given that this is an ASHRAE 6-year-lookback rulemaking, DOE will first look to the projected energy savings that are likely to result in ''significant energy savings,'' as required under 42 U.S.C. 6295(o)(3)(B) to ensure that DOE avoids setting a standard that ''will not result in significant conservation of energy.''[4] Section 6(b)(1) of the Process Rule. To determine whether energy savings could be significant, the projected energy savings from a potential maximum technologically feasible (max-tech) standard will be evaluated against a threshold of 0.3 quadrillion Btus (quads) of site energy saved over a 30-year period. Section 6(b)(2) of the Process Rule. If the projected max-tech energy savings do not meet or exceed this threshold, those max-tech savings would then be compared to the total energy usage of the covered product to calculate a potential percentage reduction in energy usage. Section 6(b)(3) of the Process Rule. If this comparison does not yield a reduction in site energy use of at least 10 percent over a 30-year period, the analysis will end, and DOE will propose to determine that no significant energy savings would likely result from setting new or amended standards. Section 6(b)(4) of the Process Rule. If either one of the thresholds is reached, DOE will conduct analyses to ascertain whether a standard can be prescribed that produces the maximum improvement in energy efficiency that is both technologically feasible and economically justified and still constitutes significant energy savings at the level determined to be economically justified. Section 6(b)(5) of the Process Rule.

Because this rulemaking was already in progress at the time the revised Process Rule was published, DOE will apply those provisions moving forward (*i.e.,* rather than reinitiating the entire rulemaking process). However, DOE welcomes comment, information, and data bearing on the issues that would be raised in an early assessment for WSHPs.

To determine whether a potential proposed standard is economically justified, EPCA requires that DOE determine whether the benefits of the

[4] EPCA defines ''energy efficiency'' as the ratio of the useful output of services from an article of industrial equipment to the energy use of such article, measured according to the Federal test procedures. (42 U.S.C. 6311(3)) EPCA defines ''energy use'' as the quantity of energy directly consumed by an article of industrial equipment at the point of use, as measured by the Federal test procedures. (42 U.S.C. 6311(4)) Given this context, DOE relies on site energy as the appropriate metric for evaluating the significance of energy savings.

standard exceed its burdens by considering, to the greatest extent practicable, the following seven factors:

(1) The economic impact of the standard on manufacturers and consumers of the equipment subject to the standard;

(2) The savings in operating costs throughout the estimated average life of the covered equipment in the type (or class) compared to any increase in the price of, initial charges for, or maintenance expenses of the covered equipment that are likely to result from the standard;

(3) The total projected amount of energy savings likely to result directly from the standard;

(4) Any lessening of the utility or the performance of the covered equipment likely to result from the standard;

(5) The impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard;

(6) The need for national energy conservation; and

(7) Other factors the Secretary of Energy (Secretary) considers relevant.

(42 U.S.C. 6313(a)(6)(C)(i)(II), *referencing* 42 U.S.C. 6313(a)(6)(B)(ii)(I)–(VII))

DOE fulfills these and other applicable requirements by conducting a series of analyses throughout the rulemaking process. Table I.1 shows the individual analyses that are performed to satisfy each of the requirements within EPCA.

TABLE I.1—EPCA REQUIREMENTS AND CORRESPONDING DOE ANALYSIS

EPCA requirement	Corresponding DOE analysis
Significant Energy Savings	• Shipments Analysis. • National Impact Analysis. • Energy and Water Use Determination.
Technological Feasibility	• Market and Technology Assessment. • Screening Analysis. • Engineering Analysis.
Economic Justification	
1. Economic impact on manufacturers and consumers.	• Manufacturer Impact Analysis. • Life-Cycle Cost and Payback Period Analysis. • Life-Cycle Cost Subgroup Analysis. • Shipments Analysis.
2. Lifetime operating cost savings compared to increased cost for the product.	• Mark-ups for Product Price Determination. • Energy and Water Use Determination. • Life-Cycle Cost and Payback Period Analysis.
3. Total projected energy savings	• Shipments Analysis. • National Impact Analysis.
4. Impact on utility or performance	• Screening Analysis. • Engineering Analysis.
5. Impact of any lessening of competition	• Manufacturer Impact Analysis.
6. Need for national energy and water conservation.	• Shipments Analysis. • National Impact Analysis.
7. Other factors the Secretary considers relevant.	• Employment Impact Analysis. • Utility Impact Analysis. • Emissions Analysis. • Monetization of Emission Reductions Benefits. • Regulatory Impact Analysis.

As detailed throughout this RFI, DOE is publishing this document seeking input and data from interested parties to aid in the development of the technical analyses on which DOE will ultimately rely to determine whether (and if so, how) to amend the energy conservation standards for WSHPs.

II. Request for Information and Comments

In the following sections, DOE has identified a variety of issues on which it seeks input to aid in the development of the technical and economic analyses regarding whether amended standards for WSHPs may be warranted. DOE also welcomes comments on other issues relevant to this data-gathering process that may not specifically be identified in this document.

In addition, as an initial matter, DOE seeks comment on whether there have been sufficient technological or market changes since the most recent standards update that may justify a new rulemaking to consider more-stringent standards. Specifically, DOE seeks data and information that could enable the agency to determine whether DOE should propose a ''no new standard'' determination because a more-stringent standard: (1) Would not result in a significant additional savings of energy; (2) is not technologically feasible; (3) is not economically justified; or (4) any combination of foregoing.

A. Equipment Covered by This Process

This RFI covers equipment that meet the definitions of WSHPs, as codified at 10 CFR 431.92. The current definition for WSHPs was established in the July 2015 Final Rule. 80 FR 42614, 42632, 42664 (July 17, 2015).

DOE defines ''water-source heat pump'' as a single-phase or three-phase reverse-cycle heat pump that uses a circulating water loop as the heat source for heating and as the heat sink for cooling. The main components are a compressor, refrigerant-to-water heat exchanger, refrigerant-to-air heat exchanger, refrigerant expansion devices, refrigerant reversing valve, and indoor fan. Such equipment includes, but is not limited to, water-to-air water-loop heat pumps. 10 CFR 431.92. EPCA excludes from the definition of ''commercial package air conditioning and heating equipment'' ground-water-source units. (42 U.S.C. 6311(8)(A)) As such, ''water-source heat pump'' does not include ground-water-source units.

Issue A.1 DOE requests comment on whether the definition for WSHPs requires any revisions—and if so, how the definition should be revised. Please provide the rationale for any suggested change.

Issue A.2 DOE requests comment on whether additional equipment

definitions are necessary to close any potential gaps in coverage between equipment categories. If there are such gaps, DOE also seeks input on whether WSHP models currently exist in the market that are in such a gap or whether they are being planned for introduction.

B. Market and Technology Assessment

The market and technology assessment that DOE routinely conducts when analyzing the impacts of a potential new or amended energy conservation standard provides information about the WSHP industry that will be used in DOE's analysis throughout the rulemaking process. DOE uses qualitative and quantitative information to characterize the structure of the industry and market. DOE identifies manufacturers, estimates market shares and trends, addresses regulatory and non-regulatory initiatives intended to improve energy efficiency or reduce energy consumption, and explores the potential for efficiency improvements in the design and manufacturing of WSHPs. DOE also reviews product literature, industry publications, and company websites. Additionally, DOE considers conducting interviews with manufacturers to improve its assessment of the market and available technologies for WSHPs.

1. Energy Efficiency Descriptor

For WSHPs, DOE currently prescribes energy efficiency ratio (EER) as the cooling mode metric and coefficient of performance (COP) as the heating mode metric. 10 CFR 431.96. These energy efficiency descriptors are the same as those included in ASHRAE 90.1–2019 for WSHPs. EER is the ratio of the produced cooling effect of the WSHP to its net work input, expressed in Btu/watt-hour, and measured at standard rating conditions. COP is the ratio of the produced heating effect of the WSHP to its net work input, when both are expressed in identical units of measurement, and measured at standard rating conditions. DOE's test procedure for WSHPs does not include a seasonal metric or part-load performance.

On June 22, 2018, DOE published an RFI (June 2018 TP RFI) to collect information and data to consider amendments to DOE's test procedure for WSHPs. 83 FR 29048. As part of the June 2018 TP RFI, DOE requested comment on whether adoption of a cooling-mode metric that integrates part-load performance would better represent full-season efficiency. 83 FR 29048, 29051 (June 22, 2018). If DOE amends the WSHP test procedure to incorporate a part-load metric, DOE would consider conducting analyses for future standards rulemakings, if any, based on the amended test procedure, including an added part-load metric.

2. Equipment Classes

For WSHPs, the current energy conservation standards specified in 10 CFR 431.97 are based on three equipment classes delineated by cooling capacity. Table II.1 lists the current three equipment classes for WSHPs.

TABLE II.1—CURRENT WSHP EQUIPMENT CLASSES

Equipment class (by cooling capacity range)	
1	<17,000 Btu/h
2	≥17,000 Btu/h and <65,000 Btu/h
3	≥65,000 Btu/h and <135,000 Btu/h

The current Federal test procedure and energy conservation standards at 10 CFR 431.96 and 10 CFR 431.97 apply only to WSHPs with a rated cooling capacity below 135,000 Btu/h. This limit of coverage is consistent with the standards and test procedures specified for WSHPs in ASHRAE 90.1–2019.

3. Review of Current Market

To inform its evaluation of WSHPs, DOE initially reviewed data in DOE's Compliance Certification Database (CCMS Database) [5] to characterize the distribution of efficiencies for WSHP equipment currently available on the market, analyzing cooling and heating efficiency separately. DOE is making available for comment a document that provides the distributions of EER and COP for WSHPs in all three equipment classes: <17,000 Btu/h, ≥17,000 Btu/h and <65,000 Btu/h, and ≥65,000 Btu/h and <135,000 Btu/h. In addition, the document shows the relationship between EER and COP for units in all three equipment classes, including scatterplots and linear regression trendlines (see Docket No. EERE–2019–BT–STD–0031–0001). Table II.2 shows the number of models listed within the DOE Compliance Certification Database that DOE has identified for each class of WSHPs.

TABLE II.2—NUMBER OF MODELS UNDER CURRENT WSHP EQUIPMENT CLASSES

Cooling capacity range (Btu/h)	Number of models
<17,000	1,041
≥17,000 and <65,000	5,263
≥65,000 and <135,000	735

4. Technology Assessment

In analyzing the feasibility of potential new or amended energy conservation standards, DOE uses information about existing and past technology options and prototype designs to help identify technologies that manufacturers could use to meet and/or exceed a given set of energy conservation standards under consideration. In consultation with interested parties, DOE intends to develop a complete list of technologies to consider in its analysis. In the interim, DOE conducted preliminary market research by examining manufacturer product literature which identified specific technologies and design options, and DOE will consider these along with others identified during the rulemaking process, should it determine that a rulemaking is necessary. Accordingly, DOE has put together a preliminary list of options in Table II.3 of this document.

TABLE II.3—PRELIMINARY TECHNOLOGY OPTIONS FOR WSHPS

Technology Options	
Heat Exchanger Improvements	Increased evaporator coil face area. Increased evaporator coil depth. Increased condenser coil surface area.
Indoor Blower Improvements	Improved fan motor efficiency (*e.g.,* electrically commutated motors (ECMs)). More-efficient fan geometries.

[5] DOE's Compliance Certification Database is available at: *https://www.regulations.doe.gov/certification-data/products.html#q=Product_Group_s%3A** (Last accessed Sept. 26, 2019).

TABLE II.3—PRELIMINARY TECHNOLOGY OPTIONS FOR WSHPS—Continued

Compressor Improvements	Improved compressor efficiency.
Other Improvements	Improved onboard pump efficiency (for units with onboard pumps).

Issue B.2 DOE seeks information on the technologies listed in Table II.3 of this document regarding their applicability to the current market and how these technologies may impact the efficiency of WSHPs as measured according to the DOE test procedure. Specifically, DOE seeks information on the range of efficiencies or performance characteristics that are currently available for each technology option.

Issue B.3 DOE seeks information on the technologies listed in Table II.3 of this document regarding their market adoption, costs, and any concerns with incorporating them into equipment (*e.g.,* impacts on consumer utility, potential safety concerns, manufacturing/production/implementation issues).

Issue B.4 DOE seeks comment on other technology options that it should consider for inclusion in its analysis and if these technologies may impact equipment features or consumer utility.

DOE does not consider technologies that do not have an impact on the energy consumption as measured according to the DOE test procedure. For WSHPs, technologies excluded on this basis include electronic expansion valves (EEVs) and multi-speed compressors. As discussed in section II.B.1 of this document, the current DOE test procedure for WSHPs measures efficiency at full-load conditions, while EEVs and multi-speed compressor technologies provide benefit at part-load conditions. EEVs regulate the flow of liquid refrigerant entering the evaporator and can adapt to changes in operating conditions, such as variations in temperature, humidity, and compressor staging. As a result, EEVs can control for optimum system operating parameters over a wide range of operating conditions, which would be a consideration in an evaluation of seasonal and/or part-load efficiency. Multi-speed compressors (*e.g.,* two-speed, variable-capacity, and variable-speed compressors) enable modulation of the refrigeration system cooling capacity, allowing the unit to match the cooling load. This modulation can improve efficiency by: (1) Reducing off-cycle losses; and (2) improving heat exchanger effectiveness at part-load conditions by operating at a lower refrigerant mass flow rate.

Issue B.5 DOE seeks comment on whether it is appropriate to exclude EEVs and multi-speed compressors from DOE's analysis because these features do not impact energy consumption as measured according to the current DOE test procedure.

C. Screening Analysis

The purpose of the screening analysis is to evaluate the technologies that improve equipment efficiency to determine which technologies will be eliminated from further consideration and which will be passed to the engineering analysis for further consideration.

DOE determines whether to eliminate certain technology options from further consideration based on the following criteria:

(1) *Technological feasibility.* Technologies that are not incorporated in commercial products or in working prototypes will not be considered further.

(2) *Practicability to manufacture, install, and service.* If it is determined that mass production of a technology in commercial products and reliable installation and servicing of the technology could not be achieved on the scale necessary to serve the relevant market at the time of the compliance date of the standard, then that technology will not be considered further.

(3) *Impacts on equipment utility or equipment availability.* If a technology is determined to have significant adverse impact on the utility of the equipment to significant subgroups of consumers, or result in the unavailability of any covered equipment type with performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as equipment generally available in the United States at the time, it will not be considered further.

(4) *Adverse impacts on health or safety.* If it is determined that a technology will have significant adverse impacts on health or safety, it will not be considered further.

(5) *Unique-Pathway Proprietary Technologies.* If a design option utilizes proprietary technology that represents a unique pathway to achieving a given efficiency level, that technology will not be considered further.

10 CFR part 430, subpart C, appendix A, 6(c)(3) and 7(b).

Technology options identified in the technology assessment are evaluated against these criteria using DOE analyses and inputs from interested parties (*e.g.,* manufacturers, trade organizations, and energy efficiency advocates). Technologies that pass through the screening analysis are referred to as ''design options'' in the engineering analysis. Technology options that fail to meet one or more of the listed criteria are eliminated from consideration.

DOE did not screen out any technology options in the July 2015 final rule based on any of the screening criteria.

Issue C.1 DOE requests feedback on what impact, if any, the four screening criteria described in this section would have on consideration of each of the technology options listed in Table II.3 of this document with respect to WSHPs. Similarly, DOE seeks information regarding how these same criteria would affect consideration of any other technology options not already identified in this document with respect to their potential use in WSHPs.

D. Engineering Analysis

The engineering analysis estimates the cost-efficiency relationship of equipment at different levels of increased energy efficiency (efficiency levels). This relationship serves as the basis for the cost-benefit calculations for consumers, manufacturers, and the Nation. In determining the cost-efficiency relationship, DOE estimates the increase in manufacturer production cost (MPC) associated with increasing the efficiency of equipment above the Federal minimum level (*i.e.,* the baseline), up to the maximum technologically feasible (max-tech) efficiency level for each equipment class.

DOE historically has used the following three methodologies to generate incremental manufacturing costs and establish efficiency levels (ELs) for analysis: (1) The design-option approach, which provides the incremental costs of adding to a baseline model design options that will improve its efficiency; (2) the efficiency-level approach, which provides the relative costs of achieving increases in energy

efficiency levels, without regard to the particular design options used to achieve such increases; and (3) the cost-assessment (or reverse-engineering) approach, which provides ''bottom-up'' manufacturing cost assessments for achieving various levels of increased efficiency, based on detailed cost data for parts and materials, labor, shipping/packaging, and investment for models that operate at particular efficiency levels.

1. Baseline Efficiency Levels

For each established equipment class, DOE selects a baseline model as a reference point against which any changes resulting from new or amended energy conservation standards can be measured. The baseline model in each equipment class represents the characteristics of common or typical equipment in that class. Typically, a baseline model is one that just meets the current minimum energy conservation standards and provides basic consumer utility.

If it determines that a rulemaking is necessary, consistent with this analytical approach, DOE tentatively plans to consider the current minimum energy conservation standards to establish the baseline efficiency levels for each equipment class. As discussed in section II.B.1 of this document, the current standards for WSHPs are based on the full-load metrics (*i.e.,* EER and COP). The current standards for WSHPs are found at 10 CFR 431.97 and are presented in Table II.4 of this document.

TABLE II.4—CURRENT WSHP ENERGY CONSERVATION STANDARD LEVELS

Equipment class (by cooling capacity range)	Current minimum energy conservation standard levels
<17,000 Btu/h	EER = 12.2 COP = 4.3
≥17,000 Btu/h and <65,000 Btu/h	EER = 13.0 COP = 4.3
≥65,000 Btu/h and <135,000 Btu/h	EER = 13.0 COP = 4.3

Issue D.1 DOE requests feedback on whether the current established minimum energy conservation standards for WSHPs are appropriate baseline efficiency levels for DOE to apply to each equipment class in evaluating whether to amend the current energy conservation standards for this equipment. DOE requests data and suggestions to evaluate the baseline efficiency levels in order to better evaluate the potential for amending energy conservation standards for this equipment.

Issue D.2 DOE requests feedback on the appropriate baseline efficiency levels for any newly analyzed equipment classes that are not currently in place or for any contemplated combined equipment classes, as discussed in section II.B.2 of this document. For newly analyzed equipment classes, DOE requests energy use data to develop a baseline relationship between energy use and the basis for the new class (*e.g.,* cooling capacity).

2. Maximum-Available and Maximum-Technologically-Feasible Levels

As part of DOE's analysis, DOE considers the maximum-available efficiency level, which is the highest-efficiency unit currently available on the market. DOE also considers the max-tech efficiency level, which it defines as the level that represents the theoretical maximum possible efficiency if all available design options are incorporated in a model. In many cases, the max-tech efficiency level is not commercially available because it is not economically feasible.

For the July 2015 final rule, DOE surveyed the AHRI Directory of Certified Product Performance [6] (AHRI Database) to determine the highest efficiency that commercially-available WSHP equipment could attain. 80 FR 42614, 42632 (July 17, 2015).

Table II.5 shows the maximum-available efficiency levels considered for the July 2015 final rule and based on the current market for each equipment classes. 80 FR 42614, 42634 (July 17, 2015). DOE reviewed the CCMS Database to determine the maximum-available units on the current market for each equipment class. For the July 2015 final rule analysis, DOE did not develop COP efficiency levels independent of EER efficiency levels. Rather, DOE developed the COP efficiency levels using a relationship between EER and COP from AHRI Database market data, thus determining an ''average'' COP level for each EER efficiency level. See chapter 4 of the July 2015 final rule technical support document (TSD); (Docket No.: EERE–2014–BT–STD–0015–0043 at p. 53). Therefore, DOE did not separately analyze maximum-available COP levels as part of the July 2015 final rule. See section II.D.4 of this notice for further discussion on heating efficiency levels.

TABLE II.5—MAXIMUM-AVAILABLE EFFICIENCY LEVELS FOR WSHPS

Equipment class (by cooling capacity range)	July 2015 final rule	Current market
<17,000 Btu/h	18.1 EER	18.8 EER 6.4 COP
≥17,000 Btu/h and <65,000 Btu/h	21.6 EER	19.6 EER 6.7 COP
≥65,000 Btu/h and <135,000 Btu/h	17.2 EER	18.2 EER 6.0 COP

[6] The AHRI Directory of Certified Product Performance is available at: *http://www.ahridirectory.org* (Last accessed Nov. 11, 2013).

Issue D.3 DOE seeks input on whether the current maximum-available efficiency levels are appropriate and technologically feasible for potential consideration as possible energy conservation standards for the equipment at issue—and if not, why not?

Issue D.4 DOE seeks feedback on which design options would be incorporated at a max-tech efficiency level. DOE also seeks information as to whether there are limitations on the use of certain combinations of design options.

3. Manufacturer Production Costs and Manufacturing Selling Price

As described at the beginning of this section, the main outputs of the engineering analysis are cost-efficiency relationships that describe the estimated increases in manufacturer production cost associated with higher-efficiency equipment for the analyzed equipment classes. For the July 2015 final rule, DOE developed the cost-efficiency relationships by identifying incremental improvements in efficiency for each equipment class and developing a cost for each efficiency level, based on a catalog teardown (or ''virtual teardown'') analysis, in which published manufacturer catalog data and supplementary component data were used to estimate the major physical differences between WSHPs and commercial heating and cooling products with similar components that were previously disassembled. 80 FR 42614, 42633 (July 17, 2015); *see also* chapter 3 of the July 2015 final rule TSD (EERE–2014–BT–STD–0015–0043 at p. 35).

Issue D.5 DOE requests feedback on how manufacturers would incorporate the technology options listed in Table II.3 of this document to increase energy efficiency in WSHPs beyond the current levels. This includes information on the order in which manufacturers would incorporate the different technologies to incrementally improve the efficiencies of equipment. DOE also requests feedback on whether the increased energy efficiency would lead to other design changes that would not occur otherwise. DOE is also interested in information regarding any potential impact of design options on a manufacturer's ability to incorporate additional functions or attributes in response to consumer demand.

Issue D.6 DOE also seeks input on the increase in MPC associated with incorporating each particular design option and/or with reaching efficiency levels above the baseline. Specifically, DOE is interested in whether and how the costs estimated in the July 2015 final rule have changed since the time of that analysis. DOE also requests information on the investments necessary to incorporate specific design options, including, but not limited to, costs related to new or modified tooling (if any), materials, engineering and development efforts to implement each design option, and manufacturing/production impacts.

Issue D.7 DOE requests comment on whether certain design options may not be applicable to (or incompatible with) specific equipment classes.

To account for manufacturers' non-production costs and profit margin, DOE applies a non-production cost multiplier (the manufacturer mark-up) to the MPC. The resulting manufacturer selling price (MSP) is the price at which the manufacturer distributes a unit into commerce. For the July 2015 final rule, DOE used a manufacturer mark-up of 1.30 for all WSHPs. *See* chapter 3 of the July 2015 final rule TSD (EERE–2014–BT–STD–0015–0043 at p. 39).

Issue D.8 DOE requests feedback on whether a manufacturer mark-up of 1.30 is appropriate for WSHPs.

4. Other Engineering Topics

As previously discussed, for the July 2015 final rule analysis, DOE developed COP efficiency levels using a relationship between EER and COP from AHRI Database market data, thus determining an ''average'' COP level for each EER efficiency level. As mentioned in section II.B.3 of this RFI, DOE is making available for comment a document that shows relationships between EER and COP through linear regression, based on current market data from the CCMS database (see Docket No. EERE–2019–BT–STD–0031–0001 at pp. 5–7).

Issue D.9 DOE requests feedback on whether the approach used in the July 2015 final rule of developing COP levels based on a correlated relationship between EER and COP for WSHPs is appropriate for this rulemaking, or whether cooling and heating efficiency levels should be analyzed separately. Specifically, DOE requests comment on whether the relationships between EER and COP presented for each WSHP equipment class (see Docket No. EERE–2019–BT–STD–0031–0001 at pp. 5–7) would be appropriate to use for developing COP efficiency levels based on EER efficiency levels. Additionally, DOE seeks feedback on whether WSHPs are typically designed to prioritize efficiency in cooling mode over heating mode.

DOE is aware of several different configurations of WSHPs currently on the market. Specifically, DOE understands that the most common WSHP configuration is a single-package unit, typically in a horizontal or vertical configuration. DOE has also identified WSHPs in the following configurations: split system, console (*e.g.,* installed on a wall below a window), and vertical stack units (*e.g.,* taller and narrower than typical single package WSHPs, in order to minimize footprint). DOE is considering whether the different WSHP configurations should be treated similarly in the rulemaking analyses, or whether separate analyses/inputs are warranted for each configuration.

Issue D.10 DOE requests comment on whether alternate configurations of WSHPs (*e.g.,* split systems, console units, vertical stack units) have different design options, achievable efficiency levels, or cost-efficiency relationships than typical single-package units. DOE also requests comment on whether there are any other types of WSHP configurations that may have different design options, efficiency levels, or cost-efficiency relationships. Further, DOE requests data and comment on the market share of alternate WSHP configurations.

E. Mark-ups and Distribution Channels

In generating end-user price inputs for the life-cycle cost (LCC) analysis and the national impact analysis (NIA), DOE must identify distribution channels (*i.e.,* how the products are moved from the manufacturer to the consumer), and estimate relative sales volumes through each channel. Additionally, DOE needs to determine the cost to the commercial consumer of a baseline piece of equipment that satisfies the currently applicable standards, and the cost of the more-efficient piece of equipment the consumer would purchase under potential new and/or amended standards. By applying a multiplier called a ''mark-up'' to the MSP, DOE estimates the commercial consumer's price. The appropriate mark-ups for determining the end-user equipment price depend on the distribution channels.

In the July 2015 final rule, DOE identified four distribution channels based on the analysis conducted for commercial unitary air conditioners and heat pumps, as WSHPs are also commercial equipment and move to the market through the same channels. Two distribution channels represent the sale of new equipment, and two represent the sale of replacement equipment. In the new equipment distribution channel, a WSHP manufacturer sells the equipment to a heating, ventilation, and air conditioning (HVAC) distributor,

who sells to either a small or large mechanical contractor, who in turn sells it to a general contractor, who sells it to the customer. 80 FR 42614, 42625 (July 17, 2015).

New Distribution Channels

Manufacturer → HVAC Distributor → Large Mechanical Contractor → General Contractor → End User

Manufacturer → HVAC Distributor → Small Mechanical Contractor → General Contractor → End User

In the replacement distribution channel, a WSHP manufacturer sells the product to an HVAC distributor, who then sells it to either a small or large mechanical contractor, who sells it to the customer and performs the installation. 80 FR 42614, 42625 (July 17, 2015).

Replacement Distribution Channels

Manufacturer → HVAC Distributor → Large Mechanical Contractor → End User

Manufacturer → HVAC Distributor → Small Mechanical Contractor → End User

A recent literature review indicates that the end users of WSHPs have not changed since the July 2015 final rule, and, therefore, DOE is using the same distribution channels in this RFI. 80 FR 42614, 42625 (July 17, 2015).

Were DOE to undertake an energy conservation standards rulemaking, DOE would determine the mark-ups for HVAC distributors and contractors by examining the updated versions of the sources of information used in the previous energy conservation standards rulemaking for WSHPs. In the July 2015 final rule, DOE developed baseline and incremental mark-ups based on available financial data. More specifically, DOE based the HVAC distributor mark-ups on data from the Heating, Air Conditioning, and Refrigeration Distributors International (HARDI) 2010 Profit Report. DOE also used financial data from the U.S. Census Bureau [7] to estimate mark-ups for mechanical contractors and general contractors. See Chapter 6 of the July 2015 final rule TSD for more details on mark-ups and distribution channels.

Issue E.1 DOE requests information on the existence of any distribution channels other than the four distribution channels identified in the July 2015 final rule that are used to distribute the WSHP equipment at issue into the market. DOE also requests data on the fraction of WSHPs that go through each of the four identified distribution channels, as well as the fraction of sales that go through any other identified channels. DOE also welcomes comment on its approach to estimating mark-ups and any financial data available that would assist DOE in developing mark-ups for the various segments in the above-mentioned distribution channels.

F. Energy Use Analysis

As part of a typical rulemaking process, DOE conducts an energy use analysis to identify how equipment is used by consumers, and thereby determine the energy savings potential of energy efficiency improvements. To determine the energy savings potential, DOE develops estimates of the annual unit energy consumption (UEC) for each efficiency level developed in the engineering analysis. The energy savings are calculated by comparing the UEC of a baseline product to the UECs of higher-efficiency products. In the July 2015 final rule, DOE developed estimates of the UEC in kilowatt hours (kWh) by equipment type and efficiency level (EL). Energy savings from higher-efficiency equipment was measured by comparing the UECs of higher ELs to the UEC of the ASHRAE baseline EL.[8] 80 FR 42614, 42625 (July 17, 2015). However, because this current rulemaking is being conducted under EPCA's 6-year-lookback authority, energy savings for higher-efficiency equipment was measured by comparing the UECs of higher ELs to UECs of the baseline EL (*i.e.,* the current Federal standards).

The cooling UECs came from Appendix D of the 2000 Screening Analysis for EPACT-Covered Commercial HVAC and Water-Heating Equipment (2000 Screening Analysis).[9] [10] If the efficiency levels in the 2000 Screening Analysis were identical to the levels developed in the engineering analysis for WSHPs, DOE used that UEC. For other efficiency levels, DOE scaled the UEC based on the ratio of EER. Heating UECs were developed using the 2003 Commercial Building Energy Consumption Survey [11] (CBECS 2003). DOE analyzed the heating energy use of buildings in CBECS 2003 that use heat pumps for heating and developed a national-average annual energy use per square foot value. DOE converted that into an energy use per ton value using a ton per square foot relationship derived from the energy use analysis in the 2014 Commercial Unitary Air Conditioner (CUAC) NOPR. 80 FR 1172, 1202 (Jan. 8, 2015). DOE determined that the average COP of a commercial heat pump was 2.9 and developed a heating UEC for a WSHP with a COP of 2.9 by multiplying energy use per ton by the representative capacity for each equipment class. DOE then developed corresponding COPs for each efficiency level by correlating COP to EER based on the AHRI Certified Equipment Database. To determine the heating UECs for all efficiency levels, DOE scaled the UEC based on the COP level relative to a COP of 2.9. 80 FR 42614, 42635 (July 17, 2015). DOE noted that this approach to heating energy use represented air-source heat pumps, not WSHP, and asked for comment from stakeholders on the validity of this approach in the January 2015 NOPR. 80 FR 42614, 42635 (July 17, 2015). However, no comments were received from stakeholders. Therefore, DOE maintained this approach to estimate the heating UEC.

DOE also adjusted the UECs to account for improvements in building shell characteristics and changes in internal loads, using scalars from the Energy Information Administration's National Energy Modeling System (NEMS).[12] In order to incorporate variability by region and building type into the energy use analysis, DOE created distributions of UECs using estimates of Full-Load Equivalent Operating Hours for cooling and heating developed in the 2000 Screening Analysis. DOE developed UECs for five building types: offices, lodging, education, multi-family housing, and healthcare across the nine Census divisions. 80 FR 42614, 42635 (July 17, 2015).

Issue F.1 DOE requests comment on the approach that was used to develop UECs in the energy use analysis for the

[7] Available at: *https://www.census.gov/programs-surveys/economic-census.html* (Last accessed March 12, 2020).

[8] As stated in section I.A, EPCA directs DOE to adopt the ASHRAE standard unless there is clear and convincing evidence to support a higher standard level. (42 U.S.C. 6313(a)(6)(A)(ii)(I)–(II)) The July 2015 final rule was an ASHRAE trigger rulemaking, and as DOE is obligated to adopt ASHRAE as the minimum standard level, the energy use analysis uses the UEC of the ASHRAE level as the baseline.

[9] Pacific Northwest National Laboratory, ''Screening Analysis for EPACT-Covered Commercial HVAC and Water-Heating Equipment, Report number 13232 (April 2000) (Available at: *https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-13232.pdf*).

[10] The 2000 Screening Analysis was conducted by Pacific Northwest National Laboratory on behalf of DOE to determine the energy savings potential of the efficiency levels in ASHRAE Standard 90.1–1999.

[11] Energy Information Administration, 2003 *Commercial Building Energy Consumption Survey* (2006) (Available at: *https://www.eia.gov/consumption/commercial/data/2003/index.php?view=microdata*).

[12] Available at: *https://www.eia.gov/outlooks/aeo/nems/documentation/*.

July 2015 final rule, as well as any potential improvements that might impact UECs, or data indicating actual UECs for this equipment.

Issue F.2 DOE requests comment on the building types used in the energy use analysis for the July 2015 final rule. Specifically, should any other types of commercial buildings be included in the energy use analysis?

Issue F.3 DOE requests comment on a new approach to the energy use analysis which would use the DOE commercial reference buildings to develop annual building loads for cooling and heating. The building loads would be matched with WSHP performance data in order to develop a UEC. DOE also requests performance data, as well as any data that measures the energy use of WSHPs in the field.

G. Life-Cycle Cost and Payback Period Analysis

DOE conducts the life-cycle cost (LCC) and payback period (PBP) analysis to evaluate the economic effects of potential energy conservation standards for WSHPs on individual customers. For any given efficiency level, DOE measures the PBP and the change in LCC relative to an estimated baseline level. The LCC is the total customer expense over the life of the equipment, consisting of purchase, installation, and operating costs (including expenses for energy use, maintenance, and repair). Inputs to the calculation of total installed cost include the cost of the equipment—which includes MSPs, distribution channel mark-ups, and sales taxes—and installation costs. Inputs to the calculation of operating expenses include annual energy consumption, energy prices and price projections, repair and maintenance costs, equipment lifetimes, discount rates, and the year that compliance with new and amended standards is required.

1. Repair and Maintenance Costs

In order to develop annual operating costs and savings for the life-cycle cost analysis, DOE estimates repair and maintenance costs over the lifetime of the WSHP. In the July 2015 final rule, DOE used RS Means [13] in order to develop annualized repair and maintenance costs. The repair costs represent the expenses associated with repairing or replacing a damaged component of a WSHP that has failed, and the first instance of a significant repair is on average about 10 years after the initial purchase of the WSHP. The materials portion of the repair cost scales with the manufacturer selling price, although the labor portion stays constant, so higher-efficiency units will typically have higher repair costs. The annual maintenance cost represents expenses associated with ensuring continued operation of the covered equipment over time, something which remained constant across all efficiency levels. For a detailed description of the repair and maintenance cost methodology, please refer to chapter 6 of the July 2015 final rule TSD (EERE–2014–BT–STD–0015–0043). RS Means is a leading source for facility repair and maintenance data for space conditioning equipment; as such, DOE intends to use the most current version of RS Means for any future rulemakings for WSHPs.

Issue G.1 DOE requests feedback and data on whether maintenance costs differ in comparison to the baseline maintenance costs for any of the specific technology options listed in Table II.3 of this document. To the extent that these costs differ, DOE seeks supporting data and an explanation of the reasons for those differences.

Issue G.2 DOE requests information and data on the frequency of repair and repair costs by equipment class for the technology options listed in Table II.3 of this document. While DOE is interested in information regarding each of the listed technology options, DOE is also interested in the extent to which and at what point, consumers simply replace, as opposed to repair, failed WSHPs.

H. Shipments Analysis

DOE develops shipments projections of WSHPs to calculate the national impacts of potential amended energy conservation standards on energy consumption, net present value (NPV), and future manufacturer cash flows. DOE shipments projections are based on available historical data of total annual WSHP shipments. In the July 2015 final rule, DOE used data published by the U.S. Census in the years 1980, 1983–1994, 1997–2006, and 2008–2010 to develop a time series of historical shipments. DOE projected future shipments using a linear trend developed from the historical time series. To distribute the total shipments into the three equipment classes, DOE used the shipments data provided by AHRI in 1999 and published in the 2000 Screening Analysis for EPACT-Covered Commercial HVAC and Water-Heating Equipment. 80 FR 42614, 42638 (July 17, 2015). DOE intends to update the shipments trend and equipment class breakdown with new data, if available.

Issue H.1 DOE requests DOE requests the most recent annual sales data for WSHPs (*i.e.,* number of shipments), as well as historical annual sales data going back to 2015. DOE also requests the shipments by equipment class and efficiency level for the most recent year available and if possible, for each year going back to 2015.

Table II.6 which presents the number of WSHP models listed in the DOE CCMS database [14] by equipment class, along with the fraction of models by EER bins, is an example of the types of shipments and market share data that DOE seeks in Issue H.1. DOE requests that interested parties supplement this table with shipments data from 2018. Interested parties are also encouraged to provide additional shipments data as may be relevant.

TABLE II.6—SUMMARY TABLE OF WSHP MODEL COUNTS IN THE DOE CCMS DATABASE *

Equipment class	CCMS model count (2018)	Fraction of models by EER bin (%)						
		12.2–13.2 EER	13.3–14.2 EER	14.3–15.2 EER	15.3–16.2 EER	16.3–17.2 EER	17.3–18.2 EER	> 18.3 EER
WSHP <17,000 Btu/h	1,009	39.2%	26.6%	16.7%	10.1%	3.8%	2.9%	0.8%
		13–14 EER	14.1–15 EER	15.1–16 EER	16.1–17 EER	17.1–18 EER	18.1–19 EER	> 19 EER
WSHP ≥17,000 Btu/h and <65,000 Btu/h	5,199	25.2%	28.0%	21.6%	16.0%	5.5%	3.4%	0.1%

[13] RS Means, Facilities Maintenance & Repair Cost Data 2013, *Reed Construction Data, LLC.* (*2012*).

[14] DOE's Compliance Certification Database is available at: *https://www.regulations.doe.gov/certification-data/products.html#q=Product_Group_s%3A** (Last accessed Sept. 26, 2019).

TABLE II.6—SUMMARY TABLE OF WSHP MODEL COUNTS IN THE DOE CCMS DATABASE *—Continued

Equipment class	CCMS model count (2018)	Fraction of models by EER bin (%)						
		12.2–13.2 EER	13.3–14.2 EER	14.3–15.2 EER	15.3–16.2 EER	16.3–17.2 EER	17.3–18.2 EER	> 18.3 EER
		13–14 EER	14.1–15 EER	15.1–16 EER	16.1–17 EER	17.1–18 EER	18.1–19 EER	> 19 EER
WSHP ≥65,000 Btu/h and <135,000 Btu/h ...	739	37.2%	32.3%	25.2%	4.1%	0.8%	0.4%	0.0%

* See supplemental document for plots of cooling and heating efficiency distributions of WSHPs for all three equipment classes. (Docket No. EERE–2019–BT–STD–0031–0001).

If disaggregated fractions of annual sales are not available at the equipment class or efficiency level, DOE request more aggregated annual sales at the equipment category level.

In the July 2015 final rule, DOE based equipment lifetime on a retirement function in the form of a Weibull probability distribution, with a mean of 19 years. 80 FR 42614, 42637 (July 17, 2015). A Weibull distribution is a probability distribution function that is commonly used to measure failure rates, and, therefore, DOE intends to use the same approach in this RFI with updated information on lifetimes and failure rates. Its form is similar to an exponential distribution, which would model a fixed failure rate, except that it allows for a failure rate that changes over time. For more detail on the lifetime measurement, please refer to Chapter 6 of the July 2015 final rule TSD (EERE–2014–BT–STD–0015–0043).

Issue H.2 DOE requests comment on the estimated average lifetime of 19 years and the Weibull approach, as well as any new data that is available regarding the lifetime or annual failure rates of WSHPs. DOE also requests input on whether the lifetimes changes by equipment class, efficiency, or end use.

I. Manufacturer Impact Analysis

The purpose of the manufacturer impact analysis (MIA) is to estimate the financial impact of amended energy conservation standards on manufacturers of WSHPs, and to evaluate the potential impact of such standards on direct employment and manufacturing capacity. The MIA includes both quantitative and qualitative aspects. The quantitative part of the MIA primarily relies on the Government Regulatory Impact Model (GRIM), an industry cash-flow model adapted for each product in this analysis, with the key output being industry net present value (INPV). The qualitative part of the MIA addresses the potential impacts of energy conservation standards on manufacturing capacity and manufacturing employment, as well as factors such as product characteristics, impacts on particular subgroups of firms, and important market and product trends.

As part of the MIA, DOE intends to analyze impacts of amended energy conservation standards on subgroups of manufacturers of covered equipment, including small business manufacturers. DOE uses the Small Business Administration's (SBA) small business size standards to determine whether manufacturers qualify as small businesses, which are listed by the applicable North American Industry Classification System (NAICS) code.[15] Manufacturing of WSHPs is classified under NAICS 333415, ''Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing,'' and the SBA sets a threshold of 1,250 employees or less for a domestic entity to be considered as a small business. This employee threshold includes all employees in a business's parent company and any other subsidiaries.

One aspect of assessing manufacturer burden involves examining the cumulative impact of multiple DOE standards and the product-specific regulatory actions of other Federal agencies that affect the manufacturers of a covered product or equipment. While any one regulation may not impose a significant burden on manufacturers, the combined effects of several existing or impending regulations may have serious consequences for some manufacturers, groups of manufacturers, or an entire industry. Assessing the impact of a single regulation may overlook this cumulative regulatory burden. In addition to energy conservation standards, other regulations can significantly affect manufacturers' financial operations. Multiple regulations affecting the same manufacturer can strain profits and lead companies to abandon product lines or markets with lower expected future returns than competing products. For these reasons, DOE conducts an analysis of cumulative regulatory burden as part of its rulemakings pertaining to appliance efficiency.

Issue I.1 To the extent feasible, DOE seeks the names and contact information of any domestic or foreign-based manufacturers that distribute WSHPs in commerce in the United States.

Issue I.2 DOE identified small businesses as a subgroup of manufacturers that could be disproportionally impacted by amended energy conservation standards. DOE requests the names and contact information of small business manufacturers (as defined by the SBA's size threshold) of WSHPs that distribute products in commerce in the United States. In addition, DOE requests comment on any other manufacturer subgroups that could be disproportionally impacted by amended energy conservation standards. DOE requests feedback on any potential approaches that could be considered to address impacts on manufacturers, including small businesses.

Issue I.3 DOE requests information regarding the cumulative regulatory burden impacts on manufacturers of WSHPs associated with: (1) Other DOE standards applying to different equipment that these manufacturers may also make and (2) equipment-specific regulatory actions of other Federal agencies. DOE also requests comment on its methodology for computing cumulative regulatory burden and whether there are any flexibilities it can consider that would reduce this burden while remaining consistent with the requirements of EPCA.

J. Other Energy Conservation Standards Topics

1. Market Failures

In the field of economics, a market failure is a situation in which the market outcome does not maximize societal welfare. Such an outcome would result in unrealized potential welfare. DOE welcomes comment on

[15] Available online at *https://www.sba.gov/document/support--table-size-standards.*

any aspect of market failures, especially those in the context of amended energy conservation standards for WSHPs.

2. Network Mode/''Smart'' Equipment

DOE published an RFI on the emerging smart technology appliance and equipment market. 83 FR 46886 (Sept. 17, 2018). In that RFI, DOE sought information to better understand market trends and issues in the emerging market for appliances and commercial equipment that incorporate smart technology. DOE's intent in issuing the RFI was to ensure that DOE did not inadvertently impede such innovation in fulfilling its statutory obligations in setting efficiency standards for covered products and equipment. DOE seeks comments, data, and information on the issues presented in that RFI as they may be applicable to energy conservation standards for WSHPs.

3. Other

Additionally, DOE welcomes comments on any other aspect of energy conservation standards for WSHPs that may not specifically be identified in this document. In particular, DOE notes that under Executive Order 13771, ''Reducing Regulation and Controlling Regulatory Costs,'' Executive Branch agencies such as DOE are directed to manage the costs associated with the imposition of expenditures required to comply with Federal regulations. *See* 82 FR 9339 (Feb. 3, 2017). Consistent with that Executive Order, DOE encourages the public to provide input on measures DOE could take to lower the cost of its energy conservation standards rulemakings, recordkeeping and reporting requirements, and compliance and certification requirements applicable to WSHPs while remaining consistent with the requirements of EPCA.

III. Submission of Comments

DOE invites all interested parties to submit in writing by the date specified previously in the **DATES** section of this document, comments and information on matters addressed in this document and on other matters relevant to DOE's consideration of amended energy conservations standards for WSHPs. After the close of the comment period, DOE will review the public comments received and may begin collecting data and conducting the analyses discussed in this RFI.

Submitting comments via http://www.regulations.gov. The *http://www.regulations.gov* web page requires you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies Office staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Following such instructions, persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to *http://www.regulations.gov* information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (CBI)). Comments submitted through *http://www.regulations.gov* cannot be claimed as CBI. Comments received through the website will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

DOE processes submissions made through *http://www.regulations.gov* before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that *http://www.regulations.gov* provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery/courier, or postal mail. Comments and documents submitted via email, hand delivery/courier, or postal mail also will be posted to *http://www.regulations.gov.* If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information in a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments.

Include contact information each time you submit comments, data, documents, and other information to DOE. If you submit via postal mail or hand delivery/courier, please provide all items on a CD, if feasible, in which case it is not necessary to submit printed copies. No telefacsimiles (faxes) will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, written in English, and free of any defects or viruses. Documents should not contain special characters or any form of encryption, and, if possible, they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery/courier two well-marked copies: One copy of the document marked ''confidential'' including all the information believed to be confidential, and one copy of the document marked ''non-confidential'' with the information believed to be confidential deleted. Submit these documents via email or on a CD, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

DOE considers public participation to be a very important part of the process for developing energy conservation standards. DOE actively encourages the participation and interaction of the public during the comment period in each stage of the rulemaking process. Interactions with and between members of the public provide a balanced discussion of the issues and assist DOE in the process. Anyone who wishes to be added to the DOE mailing list to receive future notices and information

about this process should contact Appliance and Equipment Standards Program staff at (202) 287–1445 or via email at *ApplianceStandardsQuestions@ee.doe.gov.*

Signing Authority

This document of the Department of Energy was signed on April 2, 2020, by Alexander N. Fitzsimmons, Deputy Assistant Secretary for Energy Efficiency Energy Efficiency and Renewable Energy, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the **Federal Register**.

Signed in Washington, DC, on April 29, 2020.

Treena V. Garrett,

Federal Register Liaison Officer, U.S. Department of Energy.

[FR Doc. 2020–09415 Filed 5–11–20; 8:45 am]

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DEPARTMENT OF ENERGY

10 CFR Part 431

[EERE–2019–BT–STD–0042]

RIN 1904–AE59

Energy Conservation Program: Energy Conservation Standards for Air-Cooled Commercial Package Air Conditioning and Heating Equipment and Commercial Warm Air Furnaces

AGENCY: Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Request for information.

SUMMARY: The U.S. Department of Energy (DOE) is initiating an effort to determine whether to amend the current energy conservation standards for air-cooled commercial package air conditioning and heating equipment (referred to as air-cooled commercial unitary air conditioners and heat pumps (ACUACs and ACUHPs) in this document), and commercial warm air furnaces (CWAFs). This request for information (RFI) solicits information from the public to help DOE determine whether amended standards for ACUACs, ACUHPs, and CWAFs, subsets of covered commercial equipment, would result in significant additional energy savings and whether such standards would be technologically feasible and economically justified. DOE welcomes written comments from the public on any subject within the scope of this document (including those topics not specifically raised in this RFI), as well as the submission of data and other relevant information.

DATES: Written comments and information are requested and will be accepted on or before June 11, 2020.

ADDRESSES: Interested persons are encouraged to submit comments using the Federal eRulemaking Portal at *http://www.regulations.gov.* Follow the instructions for submitting comments. Alternatively, interested persons may submit comments, identified by docket number EERE–2019–BT–STD–0042 and/or RIN 1904–AE59, by any of the following methods:

1. *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.

2. *Email: PkgHVACFurnace2019STD0042@ee.doe.gov.* Include the docket number EERE–2019–BT–STD–0042 and/or RIN 1904–AE59 in the subject line of the message.

3. *Postal Mail:* Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, Mailstop EE–5B, 1000 Independence Avenue SW, Washington, DC 20585–0121. Telephone: (202) 287–1445. If possible, please submit all items on a compact disc (CD), in which case it is not necessary to include printed copies.

4. *Hand Delivery/Courier:* Appliance and Equipment Standards Program, U.S. Department of Energy, Building Technologies Office, 950 L'Enfant Plaza SW, 6th Floor, Washington, DC 20024. Telephone: (202) 287–1445. If possible, please submit all items on a CD, in which case it is not necessary to include printed copies.

No telefacsimilies (faxes) will be accepted. For detailed instructions on submitting comments and additional information on this process, see section III of this document.

Docket: The docket for this activity, which includes **Federal Register** notices, comments, and other supporting documents/materials, is available for review at *PkgHVACFurnace2019STD0042@ee.doe.gov.* All documents in the docket are listed in the *http://www.regulations.gov* index. However, some documents listed in the index, such as those containing information that is exempt from public disclosure, may not be publicly available.

The docket web page can be found at: *http://www.regulations.gov/docket?D=EERE-2019-BT-STD-0042.* The docket web page contains instructions on how to access all documents, including public comments, in the docket. See section III for information on how to submit comments through *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Dr. Stephanie Johnson and Ms. Catherine Rivest, U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Office, EE–5B, 1000 Independence Avenue SW, Washington, DC 20585–0121. Telephone: (202) 287–1445. Email: *ApplianceStandardsQuestions@ee.doe.gov.*

Mr. Eric Stas, U.S. Department of Energy, Office of the General Counsel, GC–33, 1000 Independence Avenue SW, Washington, DC 20585–0121. Telephone: (202) 586–5827. Email: *Eric.Stas@hq.doe.gov.*

For further information on how to submit a comment, or review other public comments and the docket, contact the Appliance and Equipment Standards Program staff at (202) 287–1445 or by email: *ApplianceStandardsQuestions@ee.doe.gov.*

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I. Introduction

A. Authority and Background

The Energy Policy and Conservation Act, as amended (EPCA),[1] Public Law 94–163 (42 U.S.C. 6291–6317, as codified), among other things, authorizes DOE to regulate the energy efficiency of a number of consumer products and certain industrial equipment. Title III, Part C[2] of EPCA (42 U.S.C. 6311–6317, as codified), added by Public Law 95–619, Title IV, section 441(a), established the Energy Conservation Program for Certain Industrial Equipment, which sets forth a variety of provisions designed to improve energy efficiency. This equipment includes ACUACs and ACUHPs, which are a category of small, large, and very large commercial package air conditioning and heating equipment, and CWAFs, all of which are the subject of this RFI. (42 U.S.C. 6311(B)–(D) and (J)) EPCA prescribed initial standards for this equipment. (42 U.S.C. 6313(a)(1)–(2) and (4))

Under EPCA, the energy conservation program consists essentially of four parts: (1) Testing, (2) labeling, (3) Federal energy conservation standards, and (4) certification and enforcement procedures. Relevant provisions of EPCA specifically include definitions (42 U.S.C. 6311), energy conservation standards (42 U.S.C. 6313), test procedures (42 U.S.C. 6314), labeling provisions (42 U.S.C. 6315), and the authority to require information and reports from manufacturers (42 U.S.C. 6316).

Federal energy efficiency requirements for covered equipment established under EPCA generally supersede State laws and regulations concerning energy conservation testing, labeling, and standards. (42 U.S.C. 6316(a) and (b); 42 U.S.C. 6297) DOE may, however, grant waivers of Federal preemption for particular State laws or regulations, in accordance with the procedures and other provisions set forth under EPCA. (42 U.S.C. 6316(b)(2)(D))

In EPCA, Congress initially set mandatory energy conservation standards for certain types of commercial heating, air-conditioning, and water-heating equipment. (42 U.S.C. 6313(a)) Specifically, the statute sets standards for small, large, and very large commercial package air conditioning and heating equipment,[3] packaged terminal air conditioners (PTACs) and packaged terminal heat pumps (PTHPs), warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks. *Id.* In doing so, EPCA established Federal energy conservation standards at levels that generally corresponded to the levels in ASHRAE Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings,* as in effect on October 24, 1992 (*i.e.,* ASHRAE Standard 90.1–1989), for each type of covered equipment listed in 42 U.S.C. 6313(a).

In acknowledgement of technological changes that yield energy efficiency benefits, Congress further directed DOE through EPCA to consider amending the existing Federal energy conservation standard for each type of covered equipment listed, each time ASHRAE amends Standard 90.1 with respect to such equipment. (42 U.S.C. 6313(a)(6)(A)) When triggered in this manner, DOE must undertake and publish an analysis of the energy savings potential of amended energy efficiency standards, and amend the Federal standards to establish a uniform national standard at the minimum level specified in the amended ASHRAE Standard 90.1, unless DOE determines that there is clear and convincing evidence to support a determination that a more-stringent standard level as a national standard would produce significant additional energy savings and be technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(A)(i)–(ii)) If DOE decides to adopt as a uniform national standard the minimum efficiency levels specified in the amended ASHRAE Standard 90.1, DOE must establish such standard not later than 18 months after publication of the amended industry standard. (42 U.S.C. 6313(a)(6)(A)(ii)(I)) However, if DOE determines, supported by clear and convincing evidence, that a more-stringent uniform national standard would result in significant additional conservation of energy and is technologically feasible and economically justified, then DOE must establish such more-stringent uniform national standard not later than 30 months after publication of the amended ASHRAE Standard 90.1.[4] (42 U.S.C. 6313(a)(6)(A)(ii)(II) and (B)(i))

In those situations where ASHRAE has not acted to amend the levels in Standard 90.1 for the equipment types enumerated in the statute, EPCA also provides for a 6-year-lookback to consider the potential for amending the uniform national standards. (42 U.S.C. 6313(a)(6)(C)) Specifically, pursuant to the amendments to EPCA under AEMTCA, DOE is required to conduct an evaluation of each class of covered equipment in ASHRAE Standard 90.1 ''every 6 years'' to determine whether the applicable energy conservation standards need to be amended. (42 U.S.C. 6313(a)(6)(C)(i)) DOE must publish either a notice of proposed rulemaking (NOPR) to propose amended standards or a notice of determination that existing standards do not need to be amended. (42 U.S.C. 6313(a)(6)(C)(i)(I)–(II)) In proposing new standards under the 6-year-lookback review, DOE must undertake the same considerations as if it were adopting a standard that is more stringent than an amendment to ASHRAE Standard 90.1. (42 U.S.C. 6313(a)(6)(C)(i)(II); 42 U.S.C. 6313(a)(6)(B)) This is a separate statutory review obligation, as differentiated from the obligation triggered by an ASHRAE Standard 90.1 amendment, as previously discussed.

While the statute continues to defer to ASHRAE's lead on covered equipment subject to Standard 90.1, it does allow for a comprehensive review of all such equipment and the potential for adopting more-stringent standards, where supported by the requisite clear and convincing evidence. That is, DOE interprets ASHRAE's not amending Standard 90.1 with respect to a product or equipment type as ASHRAE's determination that the standard applicable to that product or equipment type is already at an appropriate level of stringency, and DOE will not amend

[1] All references to EPCA in this document refer to the statute as amended through America's Water Infrastructure Act of 2018, Public Law 115–270 (Oct. 23, 2018).

[2] For editorial reasons, upon codification in the U.S. Code, Part C was redesignated Part A–1.

[3] EPCA defines *commercial package air-conditioning and heating equipment* as meaning air-cooled, water-cooled, evaporatively-cooled, or water source (not including ground water source) electrically operated, unitary central air conditioners and central air-conditioning heat pumps for commercial application. (42 U.S.C. 6311(8)(A)) Commercial package air-conditioning and heating equipment includes ACUACs and ACUHPs.

[4] In determining whether a more-stringent standard is economically justified, EPCA directs DOE to determine, after receiving views and comments from the public, whether the benefits of the proposed standard exceed the burdens of the proposed standard by, to the maximum extent practicable, considering the following: (1) The economic impact of the standard on the manufacturers and consumers of the products subject to the standard; (2) The savings in operating costs throughout the estimated average life of the product compared to any increases in the initial cost or maintenance expense; (3) The total projected amount of energy savings likely to result directly from the standard; (4) Any lessening of the utility or the performance of the products likely to result from the standard; (5) The impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard; (6) The need for national energy conservation; and (7) Other factors the Secretary considers relevant. (42 U.S.C. 6313(a)(6)(B)(ii))

that standard unless there is clear and convincing evidence that a more-stringent level is justified. In those instances where DOE makes a determination that the standards for the equipment in question do not need to be amended, the statute requires the Department to revisit that decision within three years to either make a new determination or propose amended standards. (42 U.S.C. 6313(a)(6)(C)(iii)(II))

In a direct final rule published on January 15, 2016, (January 2016 final rule), DOE adopted amended standards for ACUACs, ACUHPs, and CWAFs. 81 FR 2420. As part of the January 2016 final rule, DOE also adopted a definition and separate standards for a sub-category of ACUACs and ACUHPs—double-duct air conditioners and heat pumps (double-duct systems). 81 FR 2420, 2446. For ACUACs and ACUHPs (other than double-duct systems), DOE adopted two tiers of amended standards with staggered compliance dates, and changed the regulated cooling metric from energy efficiency ratio (EER) to integrated energy efficiency ratio (IEER).[5] *Id.* at 81 FR 2529, 2531–2533. The first tier of amended standards—with compliance date of January 1, 2018—are equivalent to the IEER minimum efficiency levels for ACUACs and ACUHPs in ASHRAE 90.1–2016. The second tier of amended standards—with compliance date of January 1, 2023—are more stringent than the levels in ASHRAE 90.1–2016. The January 2016 final rule also adopted CWAF standards for which compliance is required beginning on January 1, 2023. These CWAF standards adopted in the January 2016 final rule are more stringent than the minimum efficiency levels for CWAF in ASHRAE Standard 90.1–2016.

Since publication of the January 2016 final rule, ASHRAE published an updated version of ASHRAE Standard 90.1 (ASHRAE Standard 90.1–2019), which updated the minimum efficiency levels for ACUACs and ACUHPs (other than double-duct systems) and CWAFs to align with those adopted by DOE in the January 2016 final rule (*i.e.,* specifying two tiers of minimum levels for ACUACs and ACUHPs, with a 2023 compliance date for the second tier).[6]

DOE established separate equipment classes for double-duct systems in the January 2016 final rule. The standard levels applicable to double-duct systems were not amended in the January 2016 final rule; therefore, the current EER standards for double-duct systems correspond to the levels in effect for all ACUACs and ACUHPs prior to the January 2016 final rule. 81 FR 2420, 2442, 2445–2446, 2532–2533 (Jan. 15, 2016). (ASHRAE 90.1–2019 does not specify efficiency requirements for double-duct systems.)

The current energy conservation standards for ACUACs, ACUHPs, and double-duct systems are codified in DOE's regulations at 10 CFR 431.97. Similarly, the energy conservation standards for CWAFs are codified at 10 CFR 431.77.

As a preliminary step in the process of reviewing the standards for ACUACs, ACUHPs, and CWAFs, DOE is publishing this RFI to request data and information pursuant to its 6-year-lookback review. (42 U.S.C. 6313(a)(6)(C)) Such information will help DOE inform its decisions, consistent with its obligations under EPCA.

B. Rulemaking Process

As discussed, DOE is required to conduct an evaluation of each class of covered equipment in ASHRAE Standard 90.1 every six years. (42 U.S.C. 6313(a)(6)(C)(i)) In making a determination of whether standards for such equipment need to be amended, DOE must follow specific statutory criteria. DOE must evaluate whether amended Federal standards would result in significant additional conservation of energy and are technologically feasible and economically justified. (42 U.S.C. 6313(a)(6)(C)(i) (*referencing* 42 U.S.C. 6313(a)(6)(A)(ii)(II)) To determine whether a potential proposed standard is economically justified, EPCA requires that DOE determine, after receiving comments on the proposed standard, whether the benefits of the standard exceed its burdens by considering, to the maximum extent practicable, the following seven statutory factors:

(1) The economic impact of the standard on manufacturers and consumers of the equipment subject to the standard;

(2) The savings in operating costs throughout the estimated average life of the covered equipment in the type (or class) compared to any increase in the price of, initial charges for, or maintenance expenses of the covered equipment which are likely to result from the standard;

(3) The total projected amount of energy savings likely to result directly from the standard;

(4) Any lessening of the utility or the performance of the covered equipment likely to result from the standard;

(5) The impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the standard;

(6) The need for national energy conservation; and

(7) Other factors the Secretary of Energy (Secretary) considers relevant.

(42 U.S.C. 6313(a)(6)(C)(i)(II), *referencing* 42 U.S.C. 6313(a)(6)(B)(ii)(I)–(VII))

DOE fulfills these and other applicable requirements by conducting a series of analyses throughout the rulemaking process. Table I–1 shows the individual analyses that are performed to satisfy each of the requirements within EPCA.

[5] The EER metric only accounts for the efficiency of the equipment operating at full load. The IEER metric factors in the efficiency of operating at part loads of 75 percent, 50 percent, and 25 percent of capacity, as well as the efficiency at full load. This is accomplished by weighting the full-load and part-load efficiencies with the average amount of time operating at each loading point. Additionally, IEER incorporates reduced condenser temperatures (*i.e.,* reduced outdoor ambient temperatures) for part-load operation.

[6] Table 6.8.1–5 of ASHRAE 90.1–2019 specifies a TE requirement of 80 percent for oil-fired warm-air furnaces ≥225,000 Btu/h applicable before January 1, 2023; however, the previous version of ASHRAE 90.1 (ASHRAE 90.1–2016) specifies a TE requirement of 81 percent for this class. DOE understands this 80 percent level in ASHRAE 90.1–2019 to be a typographical error, and understands that the TE requirement for oil-fired warm-air furnaces ≥225,000 Btu/h before January 1, 2023 should be 81 percent, aligning with ASHRAE 90.1–2016 and the current Federal standard. In any event, because this 80 percent level in ASHRAE 90.1–2019 is lower than the corresponding current Federal standard, DOE cannot consider adopting the ASHRAE 90.1–2019 level due to the ''anti-backsliding'' provision in EPCA, which prevents the Secretary from prescribing any amended standard that either increases the maximum allowable energy use or decreases the minimum required energy efficiency of a covered product. (42 U.S.C. 6313(a)(6)(B)(iii)(I)) Further, because the revised ASHRAE Standard 90.1 lowers the standard, as compared to the level specified by the national standard adopted pursuant to EPCA, DOE does not have the authority to conduct a rulemaking to consider a higher standard for that equipment pursuant to 42 U.S.C. 6313(a)(6)(A) (*i.e.,* DOE is not triggered). *See* 84 FR 3910, 3915 (Feb 13, 2019); *See also* 74 FR 36312, 36313 (July 22, 2009); 77 FR 28928, 28929 (May 16, 2012); 80 FR 42614, 42617 (July 17, 2015).

TABLE I–1—EPCA REQUIREMENTS AND CORRESPONDING DOE ANALYSIS

EPCA requirement	Corresponding DOE analysis
Significant energy savings	• Shipments Analysis. • National Impact Analysis. • Energy and Water Use Determination.
Technological Feasibility	• Market and Technology Assessment. • Screening Analysis. • Engineering Analysis.
Economic Justification:	
1. Economic impact on manufacturers and consumers	• Manufacturer Impact Analysis. • Life-Cycle Cost and Payback Period Analysis. • Life-Cycle Cost Subgroup Analysis. • Shipments Analysis.
2. Lifetime operating cost savings compared to increased cost for the product	• Mark-ups for Product Price Determination. • Energy and Water Use Determination. • Life-Cycle Cost and Payback Period Analysis.
3. Total projected energy savings	• Shipments Analysis. • National Impact Analysis.
4. Impact on utility or performance	• Screening Analysis. • Engineering Analysis.
5. Impact of any lessening of competition	• Manufacturer Impact Analysis.
6. Need for national energy and water conservation	• Shipments Analysis. • National Impact Analysis.
7. Other factors the Secretary considers relevant	• Employment Impact Analysis. • Utility Impact Analysis. • Emissions Analysis. • Monetization of Emission Reductions Benefits. • Regulatory Impact Analysis.

As detailed throughout this RFI, DOE is publishing this document seeking input and data from interested parties to aid in the development of the technical analyses on which DOE will ultimately rely to determine whether (and if so, how) to amend the energy conservation standards for ACUACs, ACUHPs, and CWAFs.

II. Request for Information and Comments

In the following sections, DOE has identified a variety of issues on which it seeks input to aid in the development of the technical and economic analyses regarding whether amended standards for ACUACs, ACUHPs, and CWAFs may be warranted. DOE also welcomes comments on other issues relevant to this data-gathering process that may not specifically be identified in this document.

In addition, as an initial matter, DOE seeks comment on whether there have been sufficient technological or market changes since the most recent standards update that may justify a new rulemaking to consider more-stringent standards. Specifically, DOE seeks data and information that could enable the agency to determine whether DOE should propose a ''no new standard'' determination because a more-stringent standard: (1) Would not result in a significant additional savings of energy; (2) is not technologically feasible; (3) is not economically justified; or (4) any combination of foregoing.

A. Equipment Covered by This Process

This RFI covers equipment that meet the definitions that apply to ACUACs, ACUHPs, and CWAFs, as codified at 10 CFR 431.92 and 431.72. The definitions that apply to ACUACs and ACUHPs were most recently amended in the January 2016 final rule— specifically, as previously discussed, a definition was added for ''double-duct air conditioner or heat pump.'' 81 FR 2420, 2446, 2529 (Jan. 15, 2016). The current definitions for CWAFs were established in a final rule published in the **Federal Register** on October 21, 2004. 69 FR 61916, 61939.

As established in 10 CFR 431.72 and 10 CFR 431.92, the definitions applicable to ACUACs, ACUHPs, and CWAFs include:

Commercial warm air furnace means a warm air furnace that is industrial equipment, and that has a capacity (rated maximum input) of 225,000 Btu per hour or more.

Commercial package air-conditioning and heating equipment means air-cooled, water-cooled, evaporatively-cooled, or water source (not including ground water source) electrically operated, unitary central air conditioners and central air-conditioning heat pumps for commercial application.

Small commercial package air-conditioning and heating equipment means commercial package air-conditioning and heating equipment that is rated below 135,000 Btu per hour (cooling capacity).

Large commercial package air-conditioning and heating equipment means commercial package air-conditioning and heating equipment that is rated—(1) At or above 135,000 Btu per hour; and (2) Below 240,000 Btu per hour (cooling capacity).

Very large commercial package air-conditioning and heating equipment means commercial package air-conditioning and heating equipment that is rated—(1) At or above 240,000 Btu per hour; and (2) Below 760,000 Btu per hour (cooling capacity).

Double-duct air conditioner or heat pump means air-cooled commercial package air conditioning and heating equipment that—(1) Is either a horizontal single package or split-system unit; or a vertical unit that consists of two components that may be shipped or installed either connected or split; (2) Is intended for indoor installation with ducting of outdoor air from the building exterior to and from the unit, as evidenced by the unit and/or all of its components being non-weatherized, including the absence of any marking (or listing) indicating compliance with UL 1995, ''Heating and Cooling Equipment,'' or any other equivalent requirements for outdoor use; (3)(i) If it is a horizontal unit, a complete unit has a maximum height of 35 inches; (ii) If it is a vertical unit, a complete unit has a maximum depth of 35 inches; and (4) Has a rated cooling

capacity greater than or equal to 65,000 Btu/h and up to 300,000 Btu/h.

Issue 1: DOE requests comment on whether the definitions that apply to ACUACs and ACUHPs require any revisions—and if so, how those definitions should be revised. Please provide the rationale for any suggested change.

Issue 2: DOE requests comment on whether the definitions for CWAFs require any revisions—and if so, how those definitions should be revised. Please provide the rationale for any suggested change.

Issue 3: DOE requests comment on whether additional equipment definitions are necessary to close any potential gaps in coverage between equipment types. DOE also seeks input on whether such models currently exist in the market or whether they are being planned for introduction.

B. Market and Technology Assessment

The market and technology assessment that DOE routinely conducts when analyzing the impacts of a potential new or amended energy conservation standard provides information about the ACUAC/ACUHP and CWAF industries that will be used in DOE's analysis throughout the rulemaking process. DOE uses qualitative and quantitative information to characterize the structure of the industry and market. DOE identifies manufacturers, estimates market shares and trends, addresses regulatory and non-regulatory initiatives intended to improve energy efficiency or reduce energy consumption, and explores the potential for efficiency improvements in the design and manufacturing of ACUACs, ACUHPs, and CWAFs. DOE also reviews equipment literature, industry publications, and company websites. Additionally, DOE considers conducting interviews with manufacturers to improve its assessment of the market and available technologies for ACUACs, ACUHPs, and CWAFs.

1. Equipment Classes

For ACUACs and ACUHPs, the current energy conservation standards specified in 10 CFR 431.97 are based on 24 equipment classes determined according to the following performance-related features that provide utility to the consumer: Rated cooling capacity, equipment type (air conditioner versus heat pump), and supplementary heating type. Table II–1 lists the current 24 equipment classes for ACUACs and ACUHPs.

TABLE II–1—CURRENT ACUAC AND ACUHP EQUIPMENT CLASSES

Equipment type	Cooling capacity	Sub-category	Heating type
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥65,000 Btu/h and <135,000 Btu/h.	AC	Electric Resistance Heating or No Heating.
			All Other Types of Heating.
		HP	Electric Resistance Heating or No Heating.
			All Other Types of Heating.
Large Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥135,000 Btu/h and <240,000 Btu/h.	AC	Electric Resistance Heating or No Heating.
			All Other Types of Heating.
		HP	Electric Resistance Heating or No Heating.
			All Other Types of Heating.
Very Large Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥240,000 Btu/h and <760,000 Btu/h.	AC	Electric Resistance Heating or No Heating.
			All Other Types of Heating.
		HP	Electric Resistance Heating or No Heating.
			All Other Types of Heating.
Small Double-Duct Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥65,000 Btu/h and <135,000 Btu/h.	AC	Electric Resistance Heating or No Heating.
			All Other Types of Heating.
		HP	Electric Resistance Heating or No Heating.
			All Other Types of Heating.
Large Double-Duct Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥135,000 Btu/h and <240,000 Btu/h.	AC	Electric Resistance Heating or No Heating.
			All Other Types of Heating.
		HP	Electric Resistance Heating or No Heating.
			All Other Types of Heating.
Very Large Double-Duct Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥240,000 Btu/h and <300,000 Btu/h.	AC	Electric Resistance Heating or No Heating.
			All Other Types of Heating.
		HP	Electric Resistance Heating or No Heating.
			All Other Types of Heating.

AC = Air conditioner; HP = Heat pump.

For CWAFs, the current energy conservation standards specified in 10 CFR 431.77 are based on two equipment classes determined according to fuel source (*e.g.,* oil-fired or gas-fired). The two CWAF equipment classes are gas-fired CWAFs and oil-fired CWAFs.

2. Technology Assessment

In analyzing the feasibility of potential new or amended energy conservation standards, DOE uses information about existing and past technology options and prototype designs to help identify technologies that manufacturers could use to meet and/or exceed a given set of energy conservation standards under consideration. In consultation with interested parties, DOE intends to develop a list of technologies to consider in its analysis. That analysis will likely include a number of the technology options DOE previously considered during its most recent rulemaking for ACUACs, ACUHPs, and CWAFs (*i.e.,* the January 2016 final rule). 81 FR 2420 (Jan. 15, 2016). A complete list of those prior options for ACUACs, ACUHPs, and CWAFs appear in Table II.2 and Table II.3 respectively.

TABLE II.2—TECHNOLOGY OPTIONS FOR ACUACS AND ACUHPS CONSIDERED IN THE DEVELOPMENT OF THE JANUARY 2016 FINAL RULE

Technology Options	
Compressor	High-Efficiency Compressors. Multiple Compressor Staging. Variable-Capacity or Multiple-Tandem Compressors.
Heat Exchangers.	Larger Heat Exchangers. Microchannel Heat Exchangers. Electro-Hydrodynamic Enhancement. Subcoolers.
Condenser Fans and Fan Motors	Larger Fan Diameter. More-Efficient Fan Blades. High-Efficiency Motors. Variable-Speed Fans/Motors.
Evaporator Fans and Fan Motors	Larger Fan Diameter. More-Efficient Fan Blades. High-Efficiency Motors. Variable-Speed Fans/Motors. Synchronous (Toothed Belts). Direct-Drive Fans.
Expansion Valves	Thermostatic Expansion Valve. Electronic Expansion Valve.

TABLE II.3—TECHNOLOGY OPTIONS FOR CWAFS CONSIDERED IN THE DEVELOPMENT OF THE JANUARY 2016 FINAL RULE

Technology Options	
Technology Options that Improve Thermal Efficiency	Condensing Secondary Heat Exchanger. Increased Heat Exchanger Surface Area. Heat Exchanger Enhancements. Low-NO_X Premix Burners. Burner De-rating. Low Pressure, Air-Atomized Burner (Oil-fired CWAF Only). Concentric Venting. Pulse Combustion. High-static Flame-retention Head Oil Burner.
Technology Options that Do Not Improve Thermal Efficiency*	Two-stage or Modulating Combustion. Insulation Improvements. Delayed-Action Oil Pump Solenoid Valve (Oil-fired CWAF Only). Off-Cycle Dampers. Electronic Ignition.

* Technology options that do not improve thermal efficiency are shown for informational purposes only, and will not be the basis for a decision regarding whether to amend standards because they do not affect the regulatory metric (*i.e.,* thermal efficiency).

Issue 4: DOE seeks information on the technologies listed in Table II.2 regarding their applicability to the current market and how these technologies may impact the efficiency of ACUACs and ACUHPs, including double-duct systems, as measured according to the DOE test procedure. DOE also seeks information on how these technologies may have changed since they were considered in the January 2016 final rule analysis. Specifically, DOE seeks information on the range of efficiencies or performance characteristics that are currently available for each technology option.

Issue 5: DOE seeks information on the technologies listed in Table II.3 regarding their applicability to the current market and how these technologies may impact the efficiency of CWAFs as measured according to the DOE test procedure. DOE also seeks information on how these technologies may have changed since they were considered in the January 2016 final rule analysis. Specifically, DOE seeks information on the range of efficiencies or performance characteristics that are currently available for each technology option.

Issue 6: DOE seeks information on the technologies listed in Tables II.2 and II.3 regarding any changes in their market adoption, costs, and any concerns with incorporating them into equipment (*e.g.,* impacts on consumer utility, potential safety concerns, manufacturing/production/implementation issues), that may have occurred since the January 2016 final rule.

Issue 7: DOE seeks comment on other technology options that it should consider for inclusion in its analysis and if these technologies may impact equipment features or consumer utility.

C. Screening Analysis

The purpose of the screening analysis is to evaluate the technologies that improve equipment efficiency to determine which technologies will be eliminated from further consideration and which will be passed to the engineering analysis for further consideration.

DOE determines whether to eliminate certain technology options from further consideration based on the following criteria:

(1) *Technological feasibility.* Technologies that are not incorporated in commercial equipment or in working prototypes will not be considered further.

(2) *Practicability to manufacture, install, and service.* If it is determined that mass production of a technology in commercial products and reliable installation and servicing of the technology could not be achieved on the

scale necessary to serve the relevant market at the time of the compliance date of the standard, then that technology will not be considered further.

(3) *Impacts on equipment utility or equipment availability.* If a technology is determined to have significant adverse impact on the utility of the equipment to significant subgroups of consumers, or to result in the unavailability of any covered equipment type or class with performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as equipment generally available in the United States at the time, it will not be considered further.

(4) *Adverse impacts on health or safety.* If it is determined that a technology will have significant adverse impacts on health or safety, it will not be considered further.

(5) *Unique-pathway proprietary technologies.* If a design option utilizes proprietary technology that represents a unique pathway to achieving a given efficiency level, that technology will not be considered further.

See 10 CFR part 430, subpart C, appendix A, 6(e)(3) and 7(b).

Technology options identified in the technology assessment are evaluated against these criteria using DOE analyses and inputs from interested parties (*e.g.,* manufacturers, trade organizations, and energy efficiency advocates). Technologies that pass through the screening analysis are referred to as ''design options'' in the engineering analysis. Technology options that fail to meet one or more of the five criteria are eliminated from consideration.

Table II–4 and Table II–5 summarize the technology options that DOE screened out in the January 2016 final rule, and the applicable screening criteria.

TABLE II–4—PREVIOUSLY SCREENED OUT ACUAC AND ACUHP TECHNOLOGY OPTIONS FROM THE JANUARY 2016 FINAL RULE

Screened technology option	EPCA criteria (X = basis for screening out)				Unique-pathway proprietary technology
	Technological feasibility	Practicability to manufacture, install, and service	Adverse impact on equipment utility	Adverse impacts on health and safety	
Electro-hydrodynamic enhanced heat transfer	X	X			
Alternative refrigerants	X				
Sub-coolers	X				

TABLE II–5—PREVIOUSLY SCREENED OUT CWAF TECHNOLOGY OPTIONS FROM THE JANUARY 2016 FINAL RULE

Screened technology option	EPCA criteria (X = basis for screening out)				Unique-pathway proprietary technology
	Technological feasibility	Practicability to manufacture, install, and service	Adverse impact on equipment utility	Adverse impacts on health and safety	
Pulse Combustion		X		X	
Low-NO_X Premix Burner	X				
Low Pressure, Air-Atomized Burner (Oil-fired CWAF Only)	X				
Burner De-rating			X		

Issue 8: DOE requests feedback on what impact, if any, the five screening criteria described in this section would have on consideration of each of the technology options listed in Table II.2 with respect to ACUACs and ACUHPs. Similarly, DOE seeks information regarding how these same criteria would affect consideration of any other technology options not already identified in this document with respect to their potential use in ACUACs and ACUHPs, including double-duct systems.

Issue 9: DOE requests feedback on what impact, if any, the five screening criteria described in this section would have on consideration of each of the technology options listed in Table II.3 with respect to CWAFs. Similarly, DOE seeks information regarding how these same criteria would affect consideration of any other technology options not already identified in this document with respect to their potential use in CWAFs.

Issue 10: With respect to the screened out ACUAC and ACUHP technology options listed in Table II–4, DOE seeks information on whether these options would, based on current and projected assessments regarding each of them, remain screened out under the five screening criteria described in this section. With respect to each of these technology options, what steps, if any, could be (or have already been) taken to facilitate the introduction of each option as a means to improve the energy performance of ACUACs/ACUHPs, and the potential to impact consumer utility of ACUACs/ACUHPs?

Issue 11: With respect to the screened out CWAF technology options listed in Table II–5, DOE seeks information on whether these options would, based on current and projected assessments regarding each of them, remain screened out under the five screening criteria described in this section. With respect to each of these technology options, what steps, if any, could be (or have already been) taken to facilitate the introduction of each option as a means to improve the energy performance of CWAFs, and the potential to impact consumer utility of CWAFs?

D. Engineering Analysis

The engineering analysis estimates the cost-efficiency relationship of equipment at different levels of increased energy efficiency (efficiency

levels). This relationship serves as the basis for the cost-benefit calculations for consumers, manufacturers, and the Nation. In determining the cost-efficiency relationship, DOE estimates the increase in manufacturer production cost (MPC) associated with increasing the efficiency of equipment above the baseline, up to the maximum technologically feasible (max-tech) efficiency level for each equipment class.

DOE historically has used the following three methodologies to generate incremental manufacturing costs and to establish efficiency levels (ELs) for analysis: (1) The design-option approach, which provides the incremental costs of adding to a baseline model design options that will improve its efficiency; (2) the efficiency-level approach, which provides the relative costs of achieving increases in energy efficiency levels, without regard to the particular design options used to achieve such increases; and (3) the cost-assessment (or reverse-engineering) approach, which provides ''bottom-up'' manufacturing cost assessments for achieving various levels of increased efficiency, based on detailed cost data for parts and materials, labor, shipping/packaging, and investment for models that operate at particular efficiency levels.

1. Baseline Efficiency Levels

As noted previously, the current standards for each ACUAC and ACUHP equipment class (excluding double-duct systems) are found in tables 3 and 4 of 10 CFR 431.97 and are based on the IEER cooling metric and the coefficient of performance (COP) heating performance metric. The current standards for double-duct systems (which are found in tables 5 and 6 of 10 CFR 431.97) are based on the EER cooling metric and the COP heating performance metric. The current standards for each CWAF equipment class are found in 10 CFR 431.77 and are based on the thermal efficiency (TE) metric.

For each established equipment class, DOE selects a baseline model as a reference point against which any changes resulting from new or amended energy conservation standards can be measured. The baseline model in each equipment class represents the characteristics of common or typical equipment in that class. Typically, a baseline model is one that just meets the current minimum energy conservation standards and provides basic consumer utility.

If it determines that a rulemaking is necessary, consistent with this analytical approach, DOE tentatively plans to consider the energy conservations standards for which compliance is required beginning on January 1, 2023 for ACUACs and ACUHPs (other than double-duct systems) and CWAFs as the baseline efficiency levels for each equipment class. For double-duct systems, DOE tentatively plans to consider the current EER and COP energy conservation standards as the baseline efficiency levels.

Issue 12: DOE seeks comment on whether currently available models of ACUACs and ACUHPs (excluding double-duct systems) with efficiency ratings that meet or exceed the 2023 standard levels are representative of the designs and characteristics of models that would be expected to be on the market after the 2023 compliance date.

Issue 13: DOE seeks comment on whether currently available models of CWAFs with efficiency ratings that meet or exceed the 2023 standard levels are representative of the designs and characteristics of models that would be expected to be on the market after the 2023 compliance date.

Issue 14: DOE requests feedback on whether the 2023 energy conservation standards for ACUACs and ACUHPs (other than double-duct systems) and the current standards for double-duct systems are appropriate baseline efficiency levels for DOE to apply to each equipment class in evaluating whether to amend energy conservation standards for this equipment.

Issue 15: DOE requests feedback on whether the 2023 energy conservation standards for CWAFs are appropriate baseline efficiency levels for DOE to apply to each equipment class in evaluating whether to amend the current energy conservation standards for this equipment.

Issue 16: DOE requests feedback on the appropriate baseline efficiency levels for any newly analyzed equipment classes that are not currently in place or for the contemplated combined equipment classes, as discussed in section II.B.1 of this document.

2. Max-Tech Efficiency Levels

As part of the January 2016 final rule, DOE determined max-tech efficiency levels for each equipment class of ACUACs and ACUHPs (excluding double-duct systems) and CWAFs. For ACUACs and ACUHPs (excluding double-duct systems), DOE used the AHRI Directory to identify levels on the market, and DOE used differentials/correlations consistent with ASRAC Working Group recommendations to develop efficiency levels, including max-tech levels, for: (1) ''all other types of heating'' classes, (2) ACUHP IEER levels, and (3) ACUHP COP levels. (Docket No. EERE–2013–BT–STD–0007–0105 at pp. 5–17—5–19) For CWAFs, DOE used DOE's Compliance Certification Management System (CCMS) Database, manufacturers' websites, and discussions with manufacturers during manufacturer interviews to determine max-tech levels for each equipment class. (Docket No. EERE–2013–BT–STD–0021–0050 at pp 3–5, 5–4—5–5)

Table II.6 and Table II.7 present the max-tech levels by equipment class that were analyzed in the January 2016 final rule. As noted, the energy conservation standards for ACUACs and ACUHPs (excluding double-duct systems) and CWAFs were amended, with compliance required beginning in 2023. The markets are still responding in advance of that compliance date. Therefore, models at efficiency levels higher than the currently maximum available efficiency levels may be introduced in advance of the January 1, 2023 compliance date. DOE notes that, based on a review of the current market, the current max-tech levels for certain equipment classes are higher than those considered as part in the January 2016 final rule and listed in Table II.6 and Table II.7.

TABLE II.6—MAX-TECH EFFICIENCY LEVELS FOR ACUACS AND ACUHPS ANALYZED IN THE JANUARY 2016 FINAL RULE

Equipment type	Cooling capacity	Sub-category	Heating type	January 2016 final rule max-tech levels
Small Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥65,000 Btu/h and <135,000 Btu/h.	AC	Electric Resistance Heating or No Heating.	21.5 IEER.
			All Other Types of Heating	21.1 IEER.
		HP	Electric Resistance Heating or No Heating.	20.3 IEER, 3.7 COP.

TABLE II.6—MAX-TECH EFFICIENCY LEVELS FOR ACUACS AND ACUHPS ANALYZED IN THE JANUARY 2016 FINAL RULE—Continued

Equipment type	Cooling capacity	Sub-category	Heating type	January 2016 final rule max-tech levels
			All Other Types of Heating	19.9 IEER, 3.7 COP.
Large Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥135,000 Btu/h and <240,000 Btu/h.	AC	Electric Resistance Heating or No Heating.	20.1 IEER.
			All Other Types of Heating	19.7 IEER.
		HP	Electric Resistance Heating or No Heating.	18.8 IEER, 3.3 COP.
			All Other Types of Heating	18.4 IEER, 3.3 COP.
Very Large Commercial Packaged Air-Conditioning and Heating Equipment (Air-Cooled).	≥240,000 Btu/h and <760,000 Btu/h.	AC	Electric Resistance Heating or No Heating.	15.6 IEER.
			All Other Types of Heating	15.3 IEER.
		HP	Electric Resistance Heating or No Heating.	14.3 IEER, 3.2 COP.
			All Other Types of Heating	14.0 IEER, 3.2 COP.

TABLE II.7—MAX-TECH LEVELS FOR CWAFS ANALYZED IN THE JANUARY 2016 FINAL RULE

Equipment class	January 2016 final rule max-tech levels
Gas-fired commercial warm air furnaces	92 percent TE.
Oil-fired commercial warm air furnaces	92 percent TE.

Issue 17: DOE requests comment on what efficiency levels should be considered as max-tech levels for ACUACs and ACUHPs, including double-duct systems, for the evaluation of whether amended standards are warranted.

Issue 18: DOE requests comment on what efficiency levels should be considered as max-tech levels for CWAFs, for the evaluation of whether amended standards are warranted.

3. Manufacturer Production Costs and Manufacturer Selling Price

As described at the beginning of this section, the main outputs of the engineering analysis are cost-efficiency relationships that describe the estimated increases in manufacturer production cost associated with higher-efficiency equipment for the analyzed equipment classes. For the January 2016 final rule, DOE developed the cost-efficiency relationships by estimating the costs associated with efficiency levels for each analyzed equipment class through reverse-engineering. 81 FR 2420, 2451–2452 (Jan. 15, 2016).

Issue 19: DOE requests feedback on how manufacturers would incorporate the technology options listed in Table II.2 to increase energy efficiency in ACUACs and ACUHPs (including double-duct systems) beyond the current levels. This includes information on the order in which manufacturers would incorporate the different technologies to incrementally improve the efficiencies of equipment. DOE also requests feedback on whether the increased energy efficiency would lead to other design changes that would not occur otherwise. DOE is also interested in information regarding any potential impact of design options on a manufacturer's ability to incorporate additional functions or attributes in response to consumer demand.

Issue 20: DOE requests feedback on how manufacturers would incorporate the technology options listed in Table II.3 to increase energy efficiency in CWAFs beyond the current levels. This includes information on the order in which manufacturers would incorporate the different technologies to incrementally improve the efficiencies of equipment. DOE also requests feedback on whether the increased energy efficiency would lead to other design changes that would not occur otherwise. DOE is also interested in information regarding any potential impact of design options on a manufacturer's ability to incorporate additional functions or attributes in response to consumer demand.

Issue 21: DOE also seeks input on the increase in MPC associated with incorporating each particular design option and/or with reaching efficiency levels above the baseline. Specifically, DOE is interested in whether and how the costs estimated in the January 2016 final rule have changed since the time of that analysis. DOE also requests information on the investments necessary to incorporate specific design options, including, but not limited to, costs related to new or modified tooling (if any), materials, engineering and development efforts to implement each design option, and manufacturing/production impacts.

Issue 22: DOE requests comment on whether certain design options may not be applicable to (or incompatible with) specific equipment classes.

To account for manufacturers' non-production costs and profit margin, DOE applies a non-production cost multiplier (the manufacturer mark-up) to the MPC. The resulting manufacturer selling price (MSP) is the price at which the manufacturer distributes a unit into commerce. For small, large, and very large ACUACs and ACUHPs, DOE used a manufacturer mark-up of 1.3, 1.34, and 1.41 respectively in the January 2016 final rule. 81 FR 2420, 2488 (Jan. 15, 2016). For CWAFs, DOE used a manufacturer markup of 1.31 for gas-fired CWAFs and 1.28 for oil-fired CWAFs in the January 2016 final rule. *Id.* The manufacturer mark-ups from the January 2016 final rule were vetted by manufacturers in confidential interviews done at the time of that prior rulemaking and went through public notice and comment. As a result, DOE considers the manufacturer mark-ups from the January 2016 final rule to be the most robust product-specific estimate that is currently publicly available.

Issue 23: DOE requests feedback on whether manufacturer mark-ups determined in the January 2016 final rule are still appropriate for ACUACs and ACUHPs.

Issue 24: DOE requests feedback on whether manufacturer mark-ups determined in the January 2016 final rule are still appropriate for CWAFs.

E. Mark-ups and Distribution Channels

In generating end-user price inputs for the life-cycle cost (LCC) analysis and the national impact analysis (NIA), DOE must identify distribution channels (*i.e.,* how the equipment is moved from the manufacturer to the customer) and estimate relative sales volumes through each channel. Additionally, DOE needs to determine the cost to the commercial customer of a baseline piece of equipment that satisfies the currently applicable standards, and the cost of the more-efficient piece of equipment the consumer would purchase under potential new and/or amended standards. By applying a multiplier called a ''mark-up'' to the MSP, DOE estimates the commercial customer's price. The appropriate mark-ups for determining the end-user equipment price depend on the distribution channels (*i.e.,* how equipment is moved form the manufacturer to the consumer), and estimated sales volume through each channel.

In the January 2016 final rule, DOE identified two primary distribution channels through which ACUACs, ACUHPs, and CWAFs move from manufacturers to customers, one involving distributors and contractors and another from manufacturer to customer via national accounts. In the first channel, the manufacturer sells the equipment to a wholesaler, who in turn sells it to either a small or large mechanical contractor, who in turn sells it to a general contractor, who in turns sells it to the commercial customer and performs the installation. In the second channel, the manufacturer sells the equipment directly to the customer through a national account. Within these two primary channels, DOE distinguished between new and replacement applications, as only new construction applications are expected to include a general contractor. DOE also distinguished between small and large mechanical contractors. 81 FR 2420, 2467 (Jan. 15, 2016). In summary, the two distribution channels for new construction and retrofits are:

New Construction:

Manufacturer → Wholesaler → Small or Large Mechanical Contractor → General Contractor → Consumer

Manufacturer → National Account → Consumer

Retrofits:

Manufacturer → Wholesaler → Small or Large Mechanical Contractor → Consumer

Manufacturer → National Account → Consumer

Issue 25: DOE requests information on distribution channels that describe how equipment moves from manufacturer to customer and the relative sales volume through each channel. DOE requests information on any other distribution channels that may occur for this equipment. If DOE should consider other distribution channels, DOE requests information and data on the percent of equipment that relies on such channels.

To develop mark-ups for each stage of the distribution channel in the January 2016 final rule, DOE utilized several data sources. To estimate the manufacturer mark-up, DOE relied on Securities and Exchange Commission (SEC) 10–K reports filed by publicly-traded manufacturers of small, large, and very large air-cooled commercial unitary air conditioners and heat pumps and CWAF manufacturers.[7] To estimate wholesaler mark-ups, DOE relied on data from the Heating, Air-condition & Refrigeration Distributers International (HARDI) Profit Report.[8] To estimate contractor mark-ups, DOE relied on data from the U.S. Census Bureau and the Air Conditioning Contractors of America (ACCA).[9] [10]

Issue 26: For ACUACs and ACUHPs, DOE seeks recent data, including publicly-available data, to establish mark-ups for each stage of the distribution channel.

Issue 27: For CWAFs, DOE seeks recent data, including publicly-available data, to establish mark-ups for each stage of the distribution channel.

F. Energy Use Analysis

As part of a typical rulemaking process, DOE conducts an energy use analysis to identify how equipment is used by consumers, and thereby determine potential energy and customer operating cost savings from energy efficiency improvements. The energy use analysis provides representative annual energy use estimates for the efficiency levels identified in the engineering analysis.

In the January 2016 final rule, DOE only developed unit energy consumption estimates for ACUAC equipment classes that had no heating or electric resistance heating. 81 FR 2420, 2469 (Jan. 15, 2016). For all other ACUAC equipment classes with heating, the incremental change in IEER for each efficiency level increases to maintain the same energy savings as was determined for the equipment classes with electric resistance heating or no heating within each equipment class and capacity range. DOE did not perform an energy use analysis for ACUHP equipment classes because their cooling-side performance was nearly identical to that of ACUACs. Although DOE did not analyze ACUHPs in the energy use analysis in the January 2016 final rule, DOE did account for the aggregate energy savings of ACUHPs, in both cooling and heating modes, in the NIA. 81 FR 2420, 2484 (Jan. 15, 2016).

In the January 2016 final rule, DOE made use of building simulations conducted to develop a representative distribution of cooling loads for small, large, and very large ACUAC units. The simulation data consisted of a subset of 1,033 buildings from the 1995 Commercial Building Energy Consumption Survey (CBECS) that use CUAC equipment. 81 FR 2420, 2469 (Jan. 15, 2016) DOE made adjustments to the building sample to represent the building stock in the compliance year of the January 2016 final rule. The simulations data provided the hourly load profile for each building over the course of one year using typical meteorological year weather files to represent local weather. The annual energy use of each building in the sample was determined by matching the hourly load profile with equipment performance data for each representative capacity ACUAC. 81 FR 2420, 2469–2471 (Jan. 15, 2016). For more detail on the energy use analysis, please refer to Chapter 7 of the January 2016 final rule Technical Support Document for Small, Large, and Very Large Package Air Conditioning and Heating Equipment.[11]

If DOE determines a rulemaking is necessary, DOE intends to update its building loads from those used for the January 2016 final rule using

[7] U.S. Securities and Exchange Commission, SEC 10–K Reports (Available at: *http://www.sec.gov/*) (Last accessed Feb. 19, 2020).

[8] Heating, Air-Conditioning & Refrigeration Distributors International, *2010 Profit Report* (2010).

[9] U.S. Census Bureau, 2007 Plumbing, Heating, and Air-Conditioning Contractors. Sector 23: 238220, Construction: Industry Series, Preliminary Detailed Statistics for Establishments, 2007 (Available at: *https://www.census.gov/econ/isp/sampler.php?naicscode=238220&naicslevel=6*) (Last accessed March 12, 2020).

[10] Air Conditioning Contractors of America, Financial Analysis for the HVACR Contracting Industry (2005).

[11] Available at: *https://www.regulations.gov/document?D=EERE-2013-BT-STD-0007-0105.*

simulations based on DOE reference buildings. DOE also intends to update CBECS building weights to reflect ACUAC equipment in the compliance year based on the most recent release of CBECS microdata.

CWAF energy consumption includes the gas and oil fuel used for space heating and the auxiliary electrical energy use associated with the furnace electrical components. In the January 2016 final rule, DOE developed a representative sample of commercial and multi-family residential buildings with CWAFs as their primary space heating equipment using two data sources: The 2003 Commercial Building Energy Consumption Survey (CBECS 2003) [12] and the 2009 Residential Energy Consumption Survey (RECS 2009).[13] Both CBECS 2003 and RECS 2009 reported the annual space heating energy consumption, and DOE used this value to estimate the heating load of each building. The heating load is the amount of heat required to keep the occupants of a building comfortable throughout an average year. The sample that was developed captures the variability in heating loads by building type, occupancy, vintage, and location. The heating loads were then adjusted for average weather conditions, existing CWAF equipment efficiency, and for projected improvements in building shell efficiency. 81 FR 2420, 2473–2474 (Jan. 15, 2016).

To calculate CWAF energy consumption, DOE used the equipment output capacity and the heating loads to calculate burner operating hours. DOE assigned the representative 250 kbtu/hr capacity for all CWAF efficiency levels. DOE used the same fan power values as used in the CUAC analysis. 81 FR 2420, 2473 (Jan. 15, 2016). For a more detailed description of the energy use analysis, please refer to Chapter 7, Appendix 7A, and Appendix 7B of the January 2016 final rule Technical Support Document for Commercial Warm Air Furnaces.[14]

If DOE determines a rulemaking is necessary, DOE intends to use a similar approach to determine the energy consumption of CWAFs with updated data from the most recent Commercial Building Energy Consumption Survey and the most recent Residential Energy Consumption Survey.

Issue 28: DOE welcomes comment and feedback on the intended approach to estimate the energy use analysis of ACUAC and ACUHPs, including double-duct systems.

Issue 29: DOE requests comment on the proposed approach to calculate the energy consumption of CWAFs that is described above. DOE also requests any data related to field energy consumption of CWAFs, if available.

G. Life-Cycle Cost and Payback Analysis

DOE conducts the LCC and payback period (PBP) analysis to evaluate the economic effects of potential amended energy conservation standards for ACUACs, ACUHPs, and CWAFs on individual customers. For any given efficiency level, DOE measures the PBP and the change in LCC relative to an estimated baseline level (*i.e.,* the level that just meets the current minimum energy conservation standards and provides basic consumer utility). The LCC is the total customer expense over the life of the equipment, consisting of purchase, installation, and operating costs (expenses for energy use, maintenance, and repair). Inputs to the calculation of total installed cost include the cost of the equipment—which includes MSPs, distribution channel mark-ups, and sales taxes—and installation costs. Inputs to the calculation of operating expenses include annual energy consumption, energy prices and price projections, repair and maintenance costs, equipment lifetimes, discount rates, and the year that compliance with new and amended standards is required.

Equipment lifetime is the age at which the equipment is retired from service. In the January 2016 final rule, DOE based equipment lifetime on a retirement function, which utilized a Weibull probability distribution calibrated to historical stock and shipments. 81 FR 2420, 2481 (Jan. 15, 2016). A Weibull distribution is a probability distribution function that is commonly used to measure failure rates. Its form is similar to an exponential distribution, which would model a fixed failure rate, except that it allows for a failure rate that changes over time. DOE estimated lifetime distributions for equipment classes based on equipment size with mean and median values as presented in Table II–8 and Table II–9. For more detail on the lifetime measurement, please refer to Chapter 9 of the January 2016 final rule Technical Support Document for Small, Large, and Very Large Package Air Conditioning and Heating Equipment and Appendix 8F of the January 2016 final rule Technical Support Document for Commercial Warm Air Furnaces.[15]

TABLE II–8—MEAN AND MEDIAN EQUIPMENT LIFETIME BY EQUIPMENT SIZE FOR ACUACS AND ACUHPS AS DEVELOPED FOR THE JANUARY 2016 FINAL RULE

Equipment size	Mean	Median
≥65,000 Btu/h and <135,000 Btu/h	21.0	21.0
≥135,000 Btu/h and <240,000 Btu/h	22.6	23.0
≥240,000 Btu/h and <760,000 Btu/h	33.7	34.0

Issue 30: For ACUACs and ACUHPs, DOE seeks comment on the approach of using Weibull probability distributions with mean and median values as presented in Table II–8. DOE also requests data or information which can be used to inform the equipment lifetime.

TABLE II–9—MEAN AND MEDIAN EQUIPMENT LIFETIME FOR CWAFS AS DEVELOPED FOR THE JANUARY 2016 FINAL RULE

Equipment	Mean	Median
All CWAF	23.0	22.1

[12] U.S. Department of Energy—Energy Information Administration, 2012 CBECS Survey Data (Available at: *https://www.eia.gov/consumption/commercial/data/2012/index.php?view=microdata*) (Last accessed March 12, 2020).

[13] U.S. Department of Energy—Energy Information Administration, *2009 RECS Survey Data* (Available at: *http://www.eia.gov/consumption/residential/data/2009/*) (Last accessed March 12, 2020).

[14] Available at: *https://www.regulations.gov/document?D=EERE-2013-BT-STD-0021-0050.*

[15] Available at: *https://www.regulations.gov/document?D=EERE-2013-BT-STD-0007-0105.*

Issue 31: For CWAFs, DOE seeks comment on the approach of using a Weibull probability distribution with the mean and median value presented in Table II–9. DOE also requests data or information which can be used to inform the equipment lifetime.

DOE measures the life-cycle savings of an amended energy conservation standard relative to a no-new standards case that reflects the likely market in the absence of amended standards. DOE generally estimates the no-new-standards efficiency distribution using estimates for the current efficiency distribution and by projecting forward using current efficiency trends. However, as discussed in section I.A, ACUACs (not including double duct), ACUHPs (not including double duct), and CWAFs will be subject to higher stringency standards that take effect on January 1, 2023. The current market does not fully reflect compliance with the future 2023 standards, making it less certain as to how the efficiency distribution of the market will be impacted in the years after 2023.

Issue 32: DOE requests information to how the standards for ACUACs, ACUHPs, and CWAFs set to take effect in 2023 will impact the market efficiency distribution in the years after 2023. DOE requests information and data on current trends that may predict market efficiency distribution following the January 2023 compliance date.

1. Repair and Maintenance Costs

In order to develop annual operating costs and savings for the LCC analysis, DOE estimates repair and maintenance costs over the lifetime of an ACUAC, ACUHP, and CWAF. In the January 2016 final rule, DOE identified two different types of repair costs for ACUACs and ACUHPs: Non-compressor repairs and compressor repairs. 81 FR 2420, 2478–2479 (Jan. 15, 2016). Both the labor and material costs for non-compressor repair costs were developed using 2013 RS Means Facilities Maintenance & Repair Cost Data (RS Means 2013),[16] scaled with equipment price. DOE applied a one-time, non-compressor repair cost to all customers in the building sample in the seventh year of the equipment's lifetime. Compressor repair costs were developed using price information for compressors from a commercial and industrial supplier [17] and labor rates from RS Means 2013, scaled with equipment price. DOE applied a one-time compressor repair cost to 20 percent of customers in the thirteenth year of the equipment's lifetime. DOE used RS Means 2013 to calculate the maintenance costs for ACUACs and ACUHPs. For more detail on the repair and maintenance costs, please refer to Chapter 8 of the January 2016 final rule Technical Support Document for Small, Large, and Very Large Package Air Conditioning and Heating Equipment.[18]

For CWAFs, DOE developed its repair costs using RS Means 2013. For condensing furnaces, DOE included additional maintenance costs to inspect the condensate withdrawal system and to clean the secondary heat exchanger. For more detail on the repair and maintenance costs, please refer to Chapter 8 and Appendix 8E of the January 2016 final rule Technical Support Document for Commercial Warm Air Furnaces.[19]

Issue 33: DOE requests feedback on the approach for repair and maintenance costs for ACUACs and ACUHPs used in the January 2016 final rule and proposed for use in this current rulemaking.

Issue 34: DOE requests feedback on its planned use of RS Means to develop repair and maintenance costs for CWAFs.

H. Shipments Analysis

DOE develops shipments forecasts of ACUACs, ACUHPs, and CWAFs to calculate the national impacts of potential amended energy conservation standards on energy consumption, net present value (NPV), and future manufacturer cash flows. DOE shipments projections are based on available historical data broken out by equipment class, capacity, and efficiency. Current sales estimates allow for a more accurate model that captures recent trends in the market.

In the January 2016 final rule, DOE relied on available historic data for ACUACs and ACUHPs spanning from 1969 to 2010. For the years 1980 through 2001, for small and large ACUAC and ACUHP, DOE used shipments data provided by the Air-Conditioning and Refrigeration Institute (ARI) in 2005.[20] For the remainder of years (1969–1979 and 2002–2010), for small and large ACUAC and ACUHP and all years for very large equipment, DOE relied upon the U.S. Census Bureau's Current Industrial Reports on Refrigeration, Air Conditioning, and Warm Air Heating Equipment.[21] The last five years of historical data used in the January 2016 final rule are presented in Table II–10.

Most gas-fired CWAF units are installed as part of a combined packaged cooling and heating unit. As separate shipments data for CWAFs did not exist, DOE based its CWAF shipments on ACUAC and ACUHP shipments in the January 2016 final rule National Impact Analysis Spreadsheet [22]. DOE estimated a ratio of gas-fired CWAFs to total ACUAC shipments to populate its shipments model for CWAFs. According to a report by the Pacific Northwest National Laboratory, AHRI reported shipments of 164,300 CWAFs in 1994, which was 80 percent of the ACUAC shipments in that year. DOE also determined that 20 percent of ACUHPs have a CWAF, based on building data in CBECS 2003. The ratios of CWAF shipments to ACUAC shipments and CWAF shipments to ACUHP shipments did not change over time.

TABLE II–10—HISTORICAL SHIPMENTS OF ACUACS AND ACUHPS BY EQUIPMENT SIZE FROM THE JANUARY 2016 FINAL RULE

Year	ACUAC			ACUHP		
	Small	Large	Very Large	Small	Large	Very Large
2006	186,465	72,702	28,744	24,593	4,565	1,805

[16] RS Means, *Facilities Maintenance and Repair Cost Data 2013* (2012) (Available at: *http://rsmeans.reedconstructiondata.com/60303.aspx*) (Last accessed April 10, 2013).

[17] W.W. Grainger, *Air Conditioner Compressors* (Available at: *http://www.grainger.com/category/air-conditioner-compressors/air-conditioners/hvacand-refrigeration/ecatalog/N-jo6#nav=%2Fcategory%2Fair-conditionercompressors%2Fair-conditioners%2Fhvac-and-refrigeration%2Fecatalog%2FN-jo6*) (Last accessed May 6, 2015).

[18] Available at: *https://www.regulations.gov/document?D=EERE-2013-BT-STD-0007-0105.*

[19] Available at: *https://www.regulations.gov/document?D=EERE-2013-BT-STD-0021-0050.*

[20] Air-Conditioning, Heating, and Refrigeration Institute. Commercial Unitary Air Conditioner and Heat Pump Unit Shipments for 1980–2001 (2005).

[21] U.S. Census Bureau, MA333M—Refrigeration, Air Conditioning, and Warm Air Heating Equipment (2010) (Available at: *https://www.census.gov/data/tables/time-series/econ/cir/ma333m.html*) (Last accessed Nov. 5, 2019).

[22] Available at: *https://www.regulations.gov/document?D=EERE-2013-BT-STD-0007-0107.*

TABLE II–10—HISTORICAL SHIPMENTS OF ACUACS AND ACUHPS BY EQUIPMENT SIZE FROM THE JANUARY 2016 FINAL RULE—Continued

Year	ACUAC			ACUHP		
	Small	Large	Very Large	Small	Large	Very Large
2007	191,877	72,811	31,758	26,144	4,853	2,117
2008	176,437	68,119	29,013	24,493	4,547	1,936
2009	123,152	43,356	17,745	17,673	3,280	1,343
2010	122,792	43,964	16,756	17,703	3,286	1,252

Issue 35: DOE requests 2019 annual sales data (*i.e.,* number of shipments) for ACUACs and ACUHPs disaggregated by equipment class and size. If disaggregated fractions of annual sales are not available at the equipment class level by equipment size, DOE requests more aggregated fractions of annual sales at the equipment category level.

Issue 36: If available, DOE requests the same information in Table II–10 for the previous eight years (2011–2018).

Issue 37: DOE requests historical data on double-duct ACUAC and ACUHP systems. If the absolute number of historical shipments for double-duct systems are not available, DOE requests information on the approximate fraction of double-duct systems relative to the total shipments of ACUACs and ACUHPs.

Issue 38: DOE requests comment on its approach to develop CWAF shipments. If available, DOE requests available annual sales data (*i.e.,* number of shipments) for CWAFs for the years after 2010.

I. National Impact Analysis

The purpose of the NIA is to estimate the aggregate economic impacts of potential new or amended energy conservation standards at the national level. The NIA assesses the NES and the national NPV of total customer costs and savings that would be expected to result from new or amended standards at specific efficiency levels.

A key component of DOE's estimates of NES and NPV is the equipment energy efficiencies forecasted over time for the no-new-standards case and for standards cases. DOE generally analyzes trends in market efficiency to project the no-new-standards case efficiency over the NIA's 30-year analysis period. However, in the case of ACUAC (not including double ducted), ACUHP (not including double ducted), and CWAFs, the market is in the process of moving to compliance with the 2023 standards, which adds further uncertainty to projections of efficiency distribution over the NIA analysis period in the years following 2023 based on current trends.

Issue 39: DOE seeks information on the expected efficiency trends in the ACUAC and ACUHP markets, accounting for the impact of the 2023 standards on the ACUAC and ACUHP equipment classes. In particular, DOE requests information on how current efficiency trends will be impacted by the 2023 standards.

Issue 40: DOE seeks information on the expected efficiency trend in double-duct ACUAC and ACUHP equipment classes.

Issue 41: DOE seeks information on expected efficiency trend in the CWAF market, accounting for the impact of the 2023 standards.

J. Manufacturer Impact Analysis

The purpose of the manufacturer impact analysis (MIA) is to estimate the financial impact of amended energy conservation standards on manufacturers of ACUACs, ACUHPs, and CWAFs, and to evaluate the potential impact of such standards on direct employment and manufacturing capacity. The MIA includes both quantitative and qualitative aspects. The quantitative part of the MIA primarily relies on the Government Regulatory Impact Model (GRIM), an industry cash-flow model adapted for each category of equipment in this analysis, with the key output being industry net present value (INPV). The qualitative part of the MIA addresses the potential impacts of energy conservation standards on manufacturing capacity and manufacturing employment, as well as factors such as equipment characteristics, impacts on particular subgroups of firms, and important market and equipment trends.

As part of the MIA, DOE intends to analyze impacts of amended energy conservation standards on subgroups of manufacturers of covered equipment, including small business manufacturers. DOE uses the Small Business Administration's (SBA) small business size standards to determine whether manufacturers qualify as small businesses, which are listed by the applicable North American Industry Classification System (NAICS) code.[23] Manufacturing of ACUACs, ACUHPs, and CWAFs is classified under NAICS 335415, ''Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing,'' and the SBA sets a threshold of 1,250 employees or less for a domestic entity to be considered as a small business. This employee threshold includes all employees in a business's parent company and any other subsidiaries.

One aspect of assessing manufacturer burden involves examining the cumulative impact of multiple DOE standards and the equipment-specific regulatory actions of other Federal agencies that affect the manufacturers of a covered product or equipment. While any one regulation may not impose a significant burden on manufacturers, the combined effects of several existing or impending regulations may have serious consequences for some manufacturers, groups of manufacturers, or an entire industry. Assessing the impact of a single regulation may overlook this cumulative regulatory burden. In addition to energy conservation standards, other regulations can significantly affect manufacturers' financial operations. Multiple regulations affecting the same manufacturer can strain profits and lead companies to abandon product lines or markets with lower expected future returns than competing products. For these reasons, DOE conducts an analysis of cumulative regulatory burden as part of its rulemakings pertaining to appliance efficiency.

Issue 42: To the extent feasible, DOE seeks the names and contact information of any domestic or foreign-based manufacturers that distribute ACUACs, ACUHPs, and CWAFs in commerce in the United States.

Issue 43: DOE identified small businesses as a subgroup of manufacturers that could be disproportionally impacted by amended energy conservation standards. DOE

[23] Available at: *https://www.sba.gov/document/support--table-size-standards.*

requests the names and contact information of small business manufacturers (as defined by the SBA's size threshold) of ACUACs, ACUHPs, and CWAFs that distribute equipment in commerce in the United States. In addition, DOE requests comment on any other manufacturer subgroups that could be disproportionally impacted by amended energy conservation standards. DOE requests feedback on any potential approaches that could be considered to address impacts on manufacturers, including small businesses.

Issue 44: DOE requests information regarding the cumulative regulatory burden impacts on manufacturers of ACUACs, ACUHPs, and CWAFs associated with: (1) Other DOE standards applying to different equipment that these manufacturers may also make and (2) equipment-specific regulatory actions of other Federal agencies. DOE also requests comment on its methodology for computing cumulative regulatory burden and whether there are any flexibilities it can consider that would reduce this burden while remaining consistent with the requirements of EPCA.

K. Other Energy Conservation Standards Topics

1. Market Failures

In the field of economics, a market failure is a situation in which the market outcome does not maximize societal welfare. Such an outcome would result in unrealized potential welfare. DOE welcomes comment on any aspect of market failures, especially those in the context of amended energy conservation standards for ACUACs, ACUHPs, and CWAFs.

2. Network Mode/''Smart'' Technology

DOE published an RFI on the emerging smart technology appliance and equipment market. 83 FR 46886 (Sept. 17, 2018). In that RFI, DOE sought information to better understand market trends and issues in the emerging market for appliances and commercial equipment that incorporate smart technology. DOE's intent in issuing the RFI was to ensure that DOE did not inadvertently impede such innovation in fulfilling its statutory obligations in setting efficiency standards for covered products and equipment. DOE seeks comments, data, and information on the issues presented in that RFI as they may be applicable to energy conservation standards for ACUACs, ACUHPs, and CWAFs.

3. Other Issues

Additionally, DOE welcomes comments on any other aspect of energy conservation standards for ACUACs, ACUHPs, and CWAFs that may not specifically be identified in this document. In particular, DOE notes that under Executive Order 13771, ''Reducing Regulation and Controlling Regulatory Costs,'' Executive Branch agencies such as DOE are directed to manage the costs associated with the imposition of expenditures required to comply with Federal regulations. *See* 82 FR 9339 (Feb. 3, 2017). Consistent with that Executive Order, DOE encourages the public to provide input on measures DOE could take to lower the cost of its energy conservation standards rulemakings, recordkeeping and reporting requirements, and compliance and certification requirements applicable to ACUACs, ACUHPs, and CWAFs while remaining consistent with the requirements of EPCA.

III. Submission of Comments

DOE invites all interested parties to submit in writing by the date specified previously in the **DATES** section of this document, comments and information on matters addressed in this document and on other matters relevant to DOE's consideration of amended energy conservations standards for ACUACs, ACUHPs, and CWAFs. After the close of the comment period, DOE will review the public comments received and may begin collecting data and conducting the analyses discussed in this RFI.

Submitting comments via http://www.regulations.gov. The *http://www.regulations.gov* web page requires you to provide your name and contact information. Your contact information will be viewable to DOE Building Technologies Office staff only. Your contact information will not be publicly viewable except for your first and last names, organization name (if any), and submitter representative name (if any). If your comment is not processed properly because of technical difficulties, DOE will use this information to contact you. If DOE cannot read your comment due to technical difficulties and cannot contact you for clarification, DOE may not be able to consider your comment.

However, your contact information will be publicly viewable if you include it in the comment or in any documents attached to your comment. Any information that you do not want to be publicly viewable should not be included in your comment, nor in any document attached to your comment. Following such instructions, persons viewing comments will see only first and last names, organization names, correspondence containing comments, and any documents submitted with the comments.

Do not submit to *http://www.regulations.gov* information for which disclosure is restricted by statute, such as trade secrets and commercial or financial information (hereinafter referred to as Confidential Business Information (CBI)). Comments submitted through *http://www.regulations.gov* cannot be claimed as CBI. Comments received through the website will waive any CBI claims for the information submitted. For information on submitting CBI, see the Confidential Business Information section.

DOE processes submissions made through *http://www.regulations.gov* before posting. Normally, comments will be posted within a few days of being submitted. However, if large volumes of comments are being processed simultaneously, your comment may not be viewable for up to several weeks. Please keep the comment tracking number that *http://www.regulations.gov* provides after you have successfully uploaded your comment.

Submitting comments via email, hand delivery/courier, or postal mail. Comments and documents submitted via email, hand delivery/courier, or postal mail also will be posted to *http://www.regulations.gov.* If you do not want your personal contact information to be publicly viewable, do not include it in your comment or any accompanying documents. Instead, provide your contact information in a cover letter. Include your first and last names, email address, telephone number, and optional mailing address. The cover letter will not be publicly viewable as long as it does not include any comments.

Include contact information each time you submit comments, data, documents, and other information to DOE. If you submit via postal mail or hand delivery/courier, please provide all items on a CD, if feasible, in which case it is not necessary to submit printed copies. No telefacsimiles (faxes) will be accepted.

Comments, data, and other information submitted to DOE electronically should be provided in PDF (preferred), Microsoft Word or Excel, WordPerfect, or text (ASCII) file format. Provide documents that are not secured, written in English, and free of any defects or viruses. Documents should not contain special characters or any form of encryption, and, if possible,

they should carry the electronic signature of the author.

Campaign form letters. Please submit campaign form letters by the originating organization in batches of between 50 to 500 form letters per PDF or as one form letter with a list of supporters' names compiled into one or more PDFs. This reduces comment processing and posting time.

Confidential Business Information. Pursuant to 10 CFR 1004.11, any person submitting information that he or she believes to be confidential and exempt by law from public disclosure should submit via email, postal mail, or hand delivery/courier two well-marked copies: One copy of the document marked ''confidential'' including all the information believed to be confidential, and one copy of the document marked ''non-confidential'' with the information believed to be confidential deleted. Submit these documents via email or on a CD, if feasible. DOE will make its own determination about the confidential status of the information and treat it according to its determination.

It is DOE's policy that all comments may be included in the public docket, without change and as received, including any personal information provided in the comments (except information deemed to be exempt from public disclosure).

DOE considers public participation to be a very important part of the process for developing energy conservation standards. DOE actively encourages the participation and interaction of the public during the comment period in each stage of the rulemaking process. Interactions with and between members of the public provide a balanced discussion of the issues and assist DOE in the process.

Anyone who wishes to be added to the DOE mailing list to receive future notices and information about this process should contact Appliance and Equipment Standards Program staff at (202) 287–1445 or via email at *ApplianceStandardsQuestions@ee.doe.gov.*

Signing Authority

This document of the Department of Energy was signed on April 2, 2020, by Alexander N. Fitzsimmons, Deputy Assistant Secretary for Energy Efficiency Energy Efficiency and Renewable Energy, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE **Federal Register** Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the **Federal Register**.

Signed in Washington, DC, on April 29, 2020.

Treena V. Garrett,

Federal Register Liaison Officer, U.S. Department of Energy.

[FR Doc. 2020–09414 Filed 5–11–20; 8:45 am]

BILLING CODE 6450–01–P

COMMODITY FUTURES TRADING COMMISSION

17 CFR Part 50

RIN 3038–AE33

Swap Clearing Requirement Exemptions

AGENCY: Commodity Futures Trading Commission.

ACTION: Notice of proposed rulemaking; supplemental notice of proposed rulemaking.

SUMMARY: The Commodity Futures Trading Commission (Commission or CFTC) is proposing amendments to the regulations governing which swaps are exempt from the clearing requirement set forth in the Commodity Exchange Act (CEA). The proposed amendments would address the treatment of swaps entered into by certain central banks, sovereign entities, and international financial institutions. The Commission also is issuing a supplemental notice of proposed rulemaking to further propose amendments to exempt from required clearing swaps entered into by certain bank holding companies, savings and loan holding companies, and community development financial institutions. Lastly, the Commission is proposing to publish a compliance schedule setting forth all the past compliance dates for the 2012 and 2016 swap clearing requirement regulations and to make certain other, non-substantive technical amendments to the relevant part of its regulations.

DATES: Comments must be received on or before July 13, 2020.

ADDRESSES: You may submit comments, identified by RIN 3038–AE33, by any of the following methods:

- *CFTC Comments Portal: https://comments.cftc.gov.* Select the ''Submit Comments'' link for this rulemaking and follow the instructions on the Public Comment Form.
- *Mail:* Send to Christopher Kirkpatrick, Secretary of the Commission, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW, Washington, DC 20581.
- *Hand Delivery/Courier:* Follow the same instructions as for Mail, above.

Please submit your comments using only one of these methods. Submissions through the CFTC Comments Portal are encouraged.

All comments must be submitted in English, or if not, accompanied by an English translation. Comments will be posted as received to *https://comments.cftc.gov.* You should submit only information that you wish to make available publicly. If you wish the Commission to consider information that you believe is exempt from disclosure under the Freedom of Information Act (FOIA), a petition for confidential treatment of the exempt information may be submitted according to the procedures established in § 145.9 of the Commission's regulations.[1]

The Commission reserves the right, but shall have no obligation, to review, pre-screen, filter, redact, refuse or remove any or all of your submission from *https://www.cftc.gov* that it may deem to be inappropriate for publication, such as obscene language. All submissions that have been redacted or removed that contain comments on the merits of the rulemaking will be retained in the public comment file and will be considered as required under the Administrative Procedure Act and other applicable laws, and may be accessible under the FOIA.

FOR FURTHER INFORMATION CONTACT: Sarah E. Josephson, Deputy Director, at 202–418–5684 or *sjosephson@cftc.gov;* Megan A. Wallace, Senior Special Counsel, at 202–418–5150 or *mwallace@cftc.gov;* Melissa D'Arcy, Special Counsel, at 202–418–5086 or *mdarcy@cftc.gov;* Division of Clearing and Risk; or Ayla Kayhan, Office of the Chief Economist, at 202–418–5947 or *akayhan@cftc.gov,* in each case at the Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW, Washington, DC 20581.

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I. Background

A. Ongoing Review of Part 50 Regulations

On May 9, 2017, the Commission published in the **Federal Register** a request for information [2] seeking suggestions from the public for simplifying the Commission's regulations and practices, removing unnecessary burdens, and reducing costs. In response, a number of commenters asked the Commission to codify certain staff no-action letters and Commission guidance through rulemakings.[3] The Commission also engaged in an agency-wide review of its rules, regulations, and practices to make them simpler, less burdensome, and less costly.[4]

In its review, the Commission identified the treatment of swaps entered into with central banks, foreign governments, and international financial institutions, as set forth in the preamble to the 2012 End-User Exception final rule as a provision that should be codified.[5] In the 2012 preamble, the Commission determined, for reasons discussed below, that central banks, foreign governments, and international financial institutions should not be subject to the clearing requirement set forth in section 2(h)(1) of the CEA (Clearing Requirement).[6] The Commission is proposing regulatory revisions to codify the treatment of swaps entered into with certain central banks, foreign governments,[7] and international financial institutions.[8] The proposed rulemaking also addresses four no-action letters that the Commission's Division of Clearing and Risk (DCR) issued in 2013 and 2017 [9] in response to requests from four international financial institutions for assurance that DCR would not recommend the Commission take enforcement action for not clearing swaps covered by the Clearing Requirement, if the international financial institution satisfies the provisions in the letter. The proposed revisions to part 50 of the Commission's regulations would exempt swaps entered into with certain central banks, sovereign entities, and international financial institutions from the Clearing Requirement.[10] The Commission believes that this rule proposal is consistent with the Commission's approach set out in the preamble to the 2012 End-User Exception final rule.[11]

This proposal includes additional revisions to part 50 of the Commission's regulations that are intended to simplify the text of the requirements and to minimize the compliance obligations for market participants. The Commission is proposing to include a chart of compliance dates for all swaps that the Commission has determined are required to be cleared under Commission regulation 50.4. In addition, the Commission took this opportunity to consider the structure and organization of part 50 of the Commission's regulations and is proposing minor heading changes and restructuring amendments. The Commission is proposing to re-codify the regulatory provisions exempting eligible banks, savings associations, farm credit institutions, and credit unions from the definition of ''financial entity'' for purposes of section 2(h)(7)(A) of the CEA by moving the current requirements to a separate rule so that the exemption is easier to locate in the Commission's regulations and the conditions to claim the exemption are set forth more clearly. The Commission is not proposing to alter the substance of this exemption.

[2] *See* 82 FR 21494 (May 9, 2017) and 82 FR 23765 (May 24, 2017).

[3] *See, e.g.,* Comment Letter from the Institute of International Banking, International Swaps and Derivatives Association, Inc., and Securities Industry and Financial Markets Association dated July 24, 2017, at 2.

[4] 82 FR at 21494; 82 FR at 23765.

[5] End-User Exception to the Clearing Requirement for Swaps, 77 FR 42560 (Jul. 19, 2012) (hereinafter, the 2012 End-User Exception final rule).

[6] *Id.* at 42562.

[7] For purposes of this proposal, foreign governments will be referred to as ''sovereign entities'' for the reasons discussed below.

[8] The Commission is proposing the following definitions for these three terms: (1) The Commission is proposing to define a ''central bank'' in a new regulation 50.75(a) as meaning a reserve bank or monetary authority of a central government (including the Board of Governors of the Federal Reserve System or any of the Federal Reserve Banks) or the Bank for International Settlements; (2) the Commission is proposing to define a ''sovereign entity'' in new regulation 50.75(b) as meaning a central government (including the U.S. government), or an agency, department, or ministry of a central government; and (3) the Commission is proposing to define an ''international financial institution'' in new regulation 50.76(b) as one of 22 named entities, or any other entity that provides financing for national or regional development in which the U.S. government is a shareholder or contributing member.

[9] *See* CFTC Letter No. 13–25 (June 10, 2013) (providing no-action relief to the Corporación Andina de Fomento); CFTC Letter No. 17–57 (Nov. 7, 2017) (providing no-action relief to Banco Centroamericano de Integración Económica), CFTC Letter No. 17–58 (Nov. 7, 2017) (providing no-action relief to the European Stability Mechanism); and CFTC Letter No. 17–59 (Nov. 7, 2017) (providing no-action relief to the North American Development Bank).

[10] The swap clearing requirement of section 2(h)(1)(A) of the CEA is codified in part 50 of the Commission's regulations.

[11] *See* 77 FR at 42561–62.

Finally, on August 29, 2018, the Commission issued a notice of proposed rulemaking that would codify existing relief and exempt swaps entered into by certain bank holding companies, savings and loan holding companies, and community development financial institutions (CDFIs) from the swap clearing requirement in section 2(h)(1)(A) of the CEA.[12] The Commission is supplementing that notice of proposed rulemaking with minor amendments to the regulation rule text proposed, as well as with technical revisions, and is soliciting additional input from the public regarding this proposed exemption.[13]

The Commission is requesting comments on all of these proposed rules and rule amendments.

B. Swap Clearing Requirement

The CEA, as amended by Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act),[14] establishes a comprehensive regulatory framework for swaps. The CEA requires a swap: (1) To be cleared through a derivatives clearing organization (DCO) that is registered under the CEA or a DCO that is exempt from registration under the CEA if the Commission has determined that the swap is required to be cleared, unless an exception to the clearing requirement applies; [15] (2) to be reported to a swap data repository (SDR) or the Commission; [16] and (3) if the swap is subject to the Clearing Requirement, to be executed on a designated contract market (DCM), or swap execution facility (SEF) that is registered with the Commission pursuant to section 5h of the CEA or a SEF that has been exempted from registration pursuant to section 5h(g) of the CEA, unless no DCM or SEF has made the swap available to trade.[17]

Pursuant to section 2(h)(1)(A) of the CEA, if a swap is subject to the Clearing Requirement, it shall be unlawful for any person to engage in a swap unless that person submits such swap for clearing to a DCO that is registered under the CEA or a DCO that is exempt from registration under the CEA if the swap is required to be cleared.[18] In 2012, the Commission issued its first clearing requirement determination pertaining to four classes of interest rate swaps and two classes of credit default swaps.[19] In 2016, the Commission expanded the classes of interest rate swaps subject to the clearing requirement to cover fixed-floating interest rate swaps denominated in nine additional currencies, as well as certain additional basis swaps, forward rate agreements, and overnight index swaps.[20] The regulations implementing the Clearing Requirement are in Commission regulation 50.4.

C. Swaps With Foreign Governments, Foreign Central Banks, and International Financial Institutions Not Subject to the Clearing Requirement

In the preamble to the 2012 End-User Exception final rule, in response to specific requests from commenters that the Commission determine certain entities, or types of entities, be permitted to elect the End-User Exception, the Commission stated that based on considerations of comity and in keeping with the traditions of the international system, swaps entered into with certain foreign governments, foreign central banks, and international financial institutions should not be subject to the clearing requirement under section 2(h)(1) of the CEA.[21] The Commission did not, however, codify its determination in rule text.

The Commission provided several reasons for its determination that foreign governments, foreign central banks, and international financial institutions should not be subject to the Clearing Requirement. First, the Commission noted that the Federal Reserve Banks and the Federal Government are not subject to the Clearing Requirement under the Dodd-Frank Act.[22] The Commission stated it would therefore expect that if any part of the Federal Government, Federal Reserve Banks, or international financial institutions of which the United States is a member were to engage in swap transactions in a foreign jurisdiction, the actions of those entities with respect to those transactions should not be subject to foreign regulation.[23] Second, the Commission stated that ''canons of statutory construction 'assume that legislators take account of the legitimate sovereign interests of other nations when they write American laws.' '' [24] In addition, the Commission noted that international financial institutions operate with the benefit of certain privileges and immunities under U.S. law indicating that such entities may be treated similarly under certain circumstances.[25] The Commission stated that there is nothing in the text or legislative history of the swap-related provisions of the Dodd-Frank Act to establish that Congress intended to deviate from the traditions of the international system by subjecting foreign governments, foreign central banks, or international financial institutions to the Clearing Requirement set forth in section 2(h)(1) of the CEA.[26]

1. Foreign Governments and Foreign Central Banks

As noted in the 2012 End-User Exception final rule preamble, the Federal Reserve Banks and the Federal Government are not subject to the Clearing Requirement under the Dodd-

[12] Amendments to Clearing Exemption for Swaps Entered Into by Certain Bank Holding Companies, Savings and Loan Holding Companies, and Community Development Financial Institutions, 83 FR 44001 (Aug. 29, 2018) (hereinafter, the 2018 Proposal).

[13] The Commission confirms that this supplemental proposal is not a replacement or withdrawal of the 2018 Proposal. Unless specifically amended in this release, all regulatory provisions proposed in the 2018 Proposal remain under active consideration for adoption as final rules. As discussed further below, the Commission received only one comment letter on its 2018 Proposal.

[14] Pub. L. 111–203, 124 Stat. 1376 (2010).

[15] Section 2(h)(1) of the CEA.

[16] Sections 2(a)(13), 4r, and 21(b) of the CEA.

[17] Section 2(h)(8) of the CEA.

[18] Section 2(h)(1)(A) of the CEA.

[19] Clearing Requirement Determination Under Section 2(h) of the CEA, 77 FR 74284 (Dec. 13, 2012) (hereinafter, the 2012 Clearing Requirement Determination).

[20] Clearing Requirement Determination Under Section 2(h) of the CEA for Interest Rate Swaps, 81 FR 71202 (Oct. 14, 2016) (hereinafter, the 2016 Clearing Requirement Determination).

[21] 77 FR at 42561–62. The Commission noted that uncleared swaps with a counterparty that is subject to the CEA and Commission regulations with regard to that transaction must still comply with the CEA and Commission regulations as they pertain to uncleared swaps, *e.g.,* the recordkeeping and reporting requirements under parts 23 and 45 of the Commission's regulations. *Id.*

[22] *Id.* Congress specifically excluded any agreement, contract, or transaction a counterparty of which is a Federal Reserve bank, the Federal Government, or a Federal agency that is expressly backed by the full faith and credit of the United States from the definition of a swap under section 1a(47)(B)(ix) of the CEA. Only swaps are subject to the Clearing Requirement under the Dodd-Frank Act. *See* section 2(h) of the CEA.

[23] 77 FR at 42561–62.

[24] *Id.* at 42562 (citing *F. Hoffman-LaRoche Ltd.* v. *Empagran S.A.,* 542 U.S. 155, 164 (2004)).

[25] *Id.* at 42562 (citing various provisions of the U.S. Code, a Commission staff interpretative letter (stating ''[b]ased on the unique attributes and status of the World Bank Group as a multinational member agency, . . . the CFTC believes that the World Bank Group need not be treated as a U.S. person for purposes of application of the CFTC's Part 30 rules''), and a determination of the Board of Governors of the Federal Reserve that the Bank Holding Company Act does not apply to foreign governments because they are not ''companies'' as such term is defined in the Bank Holding Company Act).

[26] *Id.* at 42562. The Commission also noted that if a foreign government, foreign central bank, or international financial institution enters into a non-cleared swap with a counterparty that is subject to the CEA and Commission regulations with regard to that transaction, then the counterparty should still comply with the CEA and Commission recordkeeping and recording requirements that apply to non-cleared swaps.

Frank Act, and the Commission would expect that the swaps activities of these entities would not be subject to foreign regulation.[27] In order to apply consistent treatment to foreign governments and foreign central banks, the Commission stated in the preamble to the 2012 End-User Exception final rule that transactions with these entities should not be subject to the Clearing Requirement.[28]

The Commission also stated that for the purpose of the Clearing Requirement, the Commission considers the Bank for International Settlements (BIS), of which the Federal Reserve and foreign central banks are members, to be a foreign central bank, and, therefore, transactions with BIS should not be subject to the Clearing Requirement.[29]

The Commission's position with regard to the treatment of swaps with foreign governments and foreign central banks for purposes of the clearing requirement has not changed since the adoption of the 2012 End-User Exception final rule. Swaps with foreign governments and foreign central banks are not required to be cleared currently and, if this proposal is codified, would not be subject to any additional requirements.

2. International Financial Institutions

In the preamble to the 2012 End-User Exception final rule, the Commission identified 17 entities whose transactions should not be subject to the Clearing Requirement.[30] The entities include the international financial institutions defined as such in section 262r(c)(2) of Title 22 of the U.S. Code,[31] and the multilateral development banks additionally referenced in a provision of the European Market Infrastructure Regulation (EMIR) that exempts such entities from all but the reporting obligation under EMIR.[32] The Commission did not extend its determination to sovereign wealth funds or similar entities because the Commission believed these entities were similar to investment funds. The Commission stated that ''[t]he foregoing rationale and considerations do not, however, extend to sovereign wealth funds or similar entities due to the predominantly commercial nature of their activities.'' [33] The Commission's position with regard to international financial institutions has not changed since the adoption of the 2012 End-User Exception final rule. Consistent with that position, there have been four supplemental CFTC staff no-action letters that expanded the scope of international financial institutions afforded relief from the Clearing Requirement.

D. DCR No-Action Letters for Relief From the Clearing Requirement for International Financial Institutions

After the publication of the 2012 End-User Exception final rule, in 2013, DCR issued a no-action letter to Corporación Andina de Fomento (CAF), an economic development financing institution established pursuant to a treaty among 10 Latin American countries, stating DCR would not recommend that the Commission take enforcement action against CAF for failure to comply with the Clearing Requirement.[34] DCR was persuaded by CAF's representation that its organization and functions were similar to the international financial institutions addressed by the preamble to the 2012 End-User Exception final rule. DCR accepted CAF's statement that, like a number of the multilateral development banks that are named as international financial institutions in the adopting release, its purpose is to foster and promote sustainable development and economic integration. CAF also indicated it pursues its mission primarily through project and corporate lending and trade finance, generally in circumstances under which borrowers would not have access to traditional commercial lending sources.[35] DCR accepted that CAF used derivatives to hedge and reduce exposure to interest and exchange rate risks, and that it does not hold or issue derivatives for trading or speculative purposes.[36] Furthermore, DCR agreed that CAF was established pursuant to an international treaty, with strict limitations on ownership which ensure that the sovereign nations are the controlling shareholders. Additionally, the Minister of Finance or equivalent officeholder of each principal shareholder country usually serves as a board member. Due to a combination of shareholdings, share classifications and voting rights, limitations on share transfers and other governance mechanisms, DCR agreed that the principal shareholder countries are assured control over CAF. DCR agreed that CAF has been granted various immunities and privileges from the principal shareholder countries, including, among other things: Immunity from expropriation; free convertibility and transferability of its assets; exemption from all taxes and tariffs on income, properties, or assets; and exemption from any restrictions, regulations, controls, or moratoria with respect to its property or assets.

In 2017, DCR received three more requests for no-action relief from the Clearing Requirement from three other international financial institutions: (1) Banco Centroamericano de Integración Económica (CABEI) (an economic development financing institution established pursuant to a treaty among

[27] 77 FR at 42561–62. In 2013, central banks and public bodies charged with or intervening in the management of the public debt in the United States were excluded from EMIR. *See* Commission Delegated Regulation (EU) No 1002/2013 of 12 July 2013, 2013 O.J. (L 279) 2 (Oct. 19, 2013), available at *http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013R1002. See also* Commission Delegated Regulation (EU) 2017/979 of 2 March 2017 (amending Regulation (EU) No 648/2012 of the European Parliament and of the Council on OTC derivatives, central counterparties and trade repositories to exempt central banks and public bodies from Australia, Canada, Hong Kong, Mexico, Singapore, and Switzerland).

[28] 77 FR at 42562.

[29] *Id.* at 42561, n.13.

[30] The 17 international financial institutions identified in the preamble to the 2012 End-User Exception final rule are the following: (1) African Development Bank; (2) African Development Fund; (3) Asian Development Bank; (4) Bank for Economic Cooperation and Development in the Middle East and North Africa; (5) Caribbean Development Bank; (6) Council of Europe Development Bank; (7) European Bank for Reconstruction and Development; (8) European Investment Bank; (9) European Investment Fund; (10) Inter-American Development Bank; (11) Inter-American Investment Corporation; (12) International Bank for Reconstruction and Development (part of the World Bank Group); (13) International Development Association (part of the World Bank Group); (14) International Finance Corporation (part of the World Bank Group); (15) International Monetary Fund; (16) Multilateral Investment Guarantee Agency (part of the World Bank Group); and (17) Nordic Investment Bank. 77 FR at 42561–62 n.14.

[31] 22 U.S.C. 262r(c)(2).

[32] The twelve entities exempt from certain requirements under EMIR, which were also named in the 2012 End-User Exception final rule, are the following: (1) International Bank for Reconstruction and Development; (2) International Finance Corporation; (3) Inter-American Development Bank; (4) Asian Development Bank; (5) African Development Bank; (6) Council of Europe Development Bank; (7) Nordic Investment Bank; (8) Caribbean Development Bank; (9) European Bank for Reconstruction and Development; (10) European Investment Bank; (11) European Investment Fund; and (12) Multilateral Investment Guarantee Agency. *See* EMIR Article 1(5)(a) of Regulation (EU) No. 648/2012; Section 4.2 of part 1 of Annex VI to Directive 2006/48/EC, available at *http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32012R0648* and *http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32006L0048.* The Commission noted that the exemption for international financial institutions would be consistent with EMIR and other foreign laws. 77 FR at 42561 n.14.

[33] *Id.* at 42562, n.18.

[34] CFTC Letter No. 13–25 (June 10, 2013). The letter required CAF to comply with other provisions of the CEA and Commission regulations, such as the recordkeeping and reporting requirements under parts 23 and 45 of the Commission's regulations, which would apply to a non-cleared swaps entered into by CAF opposite a counterparty who is subject to the CEA and Commission regulations with regard to that transaction.

[35] *Id.* at 3.

[36] *Id.*

11 Latin American countries, Spain, and Taiwan), (2) European Stability Mechanism (ESM) (a lending institution established by European Union member states to provide emergency financial assistance to member states located in the Eurozone), and (3) North American Development Bank (NADB) (a financing institution established by the United States and Mexico under the auspices of the North American Free Trade Agreement to finance environmentally sustainable infrastructure projects in the region along the U.S.-Mexican border).[37]

CABEI, ESM, and NADB each requested to have their transactions treated like CAF and the transactions with the international financial institutions addressed by the preamble to the 2012 End-User Exception final rule. In their request letters, CABEI, ESM, and NADB argued that their functions, missions, and ownership structures are analogous to the functions, missions, and ownership structures of CAF and the international financial institutions referenced in the End-User Exception final rule.[38] Based on their representations, DCR issued no action letters to each of the requesting institutions.[39]

II. Newly Proposed Amendments to Part 50

A. New Subpart D for Swaps Not Subject to the Clearing Requirement

The Commission proposes to exempt swaps entered into with a central bank, sovereign entity, or international financial institution from the Clearing Requirement. In proposing to adopt an exemption for swaps entered into with central banks and sovereign entities in new regulation 50.75, and an exemption for swaps entered into with international financial institutions in new regulation 50.76, the Commission would be providing legal certainty to a narrowly defined group of entities that the swaps into which they enter are not subject to the Clearing Requirement, provided such swaps are reported to a swap data repository. The Commission is proposing to create a new subpart D in part 50 of the Commission's regulations for proposed regulations 50.75 and 50.76, as well as three other regulations discussed below. The creation of this new subpart is an effort to distinguish exemptions that apply to specific swaps from the exceptions and exemptions for market participants eligible to elect an exception or exemption under subpart C of part 50. This distinction is important because the proposed exemptions for swaps under subpart D would not be eligible for an analogous exemption from margin for uncleared swaps, as discussed below. Also, some of the proposed subpart D exemptions for swaps are more limited and, in some cases, have additional conditions.[40]

The Commission notes that the proposed exemptions are intended to be consistent with the Commission's determination set forth in the 2012 End-User Exception final rule and would not limit the applicability of any CEA provision or Commission regulation to any person or transaction except as provided in the proposed rulemaking.[41] This proposal modifies some of the terms that will be used to refer to the entities that are exempt from the Clearing Requirement, but this modification is not intended to change the scope or substance of the exemption. For example, in the 2012 End-User Exception final rule the Commission referred to ''foreign central banks.'' Under this proposal, the Commission is proposing to use the term ''central bank'' and to include U.S. central bank entities such as the Board of Governors of the Federal Reserve System and other Federal Reserve Banks in the definition of ''central banks'' proposed to be exempted from the Clearing Requirement. This approach is similar to the one taken by the Commission and the prudential regulators in promulgating the margin requirements for uncleared swaps.[42]

In addition, in the 2012 End-User Exception final rule, the Commission referred to certain exempt swap counterparties as ''foreign governments.'' The term ''foreign government'' was intended to refer to sovereigns, similar to the U.S. Federal Government, that were located outside of the U.S. Because the Commission distinguished the Federal Government from state and local government entities, the term ''foreign government'' was intended to apply only to the federal level of governmental organizations.[43] In an effort to make that distinction clear and to emphasize the fact that state level governmental bodies would not be eligible for this exemption, the Commission is proposing to use the term ''sovereign entities'' in this rule proposal rather than ''foreign government,'' which was the term used in the 2012 End-User Exception final rule.

The Commission seeks comment regarding the terms and definitions proposed below.

1. Proposed Definition of Central Bank

Proposed regulation 50.75(a) would set forth a definition of ''central bank.'' The proposed definition would define central bank to mean a reserve bank or monetary authority of a central government (including the Board of Governors of the Federal Reserve System or any of the Federal Reserve Banks) or the Bank for International Settlements.[44] The Commission believes an exemption from the Clearing Requirement for central banks is appropriate because these entities are created by statute, are authorized to work to promote the public interest, and are part of, or aligned with, a central government. The authorizing statutes generally provide that the government owns all or part of the capital stock or equity interest of the central bank.[45] The

[37] CFTC Letter No. 17–57, at 3 n.10; CFTC Letter No. 17–58, at 3 n.11, and CFTC Letter No. 17–59 at 3.

[38] NADB is listed as a ''multilateral development bank'' by the four most recent Reports to Congress from the Chairman of the National Advisory Council on International Monetary and Financial Policies, dated March 2016, July 2017, June 2018, and April 2019, available at *https://www.treasury.gov/resource-center/international/development-banks/Pages/congress-index.aspx.*

[39] CFTC Letter Nos. 17–57, 17–58, and 17–59, respectively. Consistent with the CAF letter, DCR required each international financial institution to comply with other provisions of the CEA and the Commission's regulations, such as the recordkeeping and reporting requirements under parts 23 and 45 of the Commission's regulations, which would apply to an uncleared swap entered into by an international financial institution opposite a counterparty that is subject to the CEA and Commission regulations with regard to that transaction.

[40] For example, the proposed exemption for swaps entered into by CDFIs in proposed regulation 50.77 of subpart D would be available only for certain types of interest rate swaps. The exceptions and exemptions under subpart C of part 50 of the Commission's regulations apply generally to an entity that satisfies certain conditions.

[41] The Commission notes that uncleared swaps with a counterparty that is subject to the CEA and Commission regulations with regard to such swaps must still comply with the CEA and Commission regulations as they pertain to uncleared swaps.

[42] *See* definition of ''sovereign entity'' in Commission regulation 23.151.

[43] 77 FR at 42562. The Commission stated that, ''Congress did not expressly exclude state and local government entities form the 'financial entity' definition. On the contrary, in Section 2(h)(7)(C)(i)(VII), Congress expressly included employee benefit plans of state and local governments in the 'financial entity' definition, thereby prohibiting them from using the end-user exception.'' *Id.*

[44] Congress specifically excluded ''any agreement, contract, or transaction a counterparty of which is a Federal Reserve bank, the Federal Government, or a Federal agency that is expressly backed by the full faith and credit of the United States'' from the definition of a swap. The proposed definition includes ''any of the Federal Reserve Banks'' for clarity.

[45] *E.g.,* Article 28.2, Capital of the ECB Protocol on the Statute of the European System of Central Banks and of the European Central Bank, available at *https://www.ecb.europa.eu/ecb/legal/pdf/en_statute_2.pdf.*

proposed definition also includes the Bank for International Settlements (BIS) for clarity. BIS is made up of only central banks and monetary authorities. The Commission therefore believes it is appropriate to include BIS in the definition of central bank for purposes of this proposal.

In Commission regulation 23.151, the definition of ''financial end user'' for purposes of the Commission's uncleared swap margin requirements excludes the Bank for International Settlements from the uncleared margin requirements.[46] Part 23 of the Commission's regulations include a separate definition for the term ''sovereign entity.'' Under Commission regulation 23.151, sovereign entity means a central government (including the U.S. government) or an agency, department, ministry, or central bank of a central government.[47] The Commission is not proposing to use identical definitions in new subpart D of part 50 as it adopted in part 23 of the Commission's regulations.[48] Certain types of entities may be defined differently for purposes of either rule set, but as an overall matter, the Commission believes this proposal to define ''sovereign entity'' and ''central bank'' is broadly consistent with part 23 of the Commission's regulations.

Request for Comment. The Commission requests comment on the scope of its proposed definition of central bank. Are there any central banks that are not established and operating pursuant to a statute? If so, should such a central bank be treated differently? Should the Commission distinguish between national central banks and regional central banks? Should the Commission consider adopting an alternative definition for ''central bank,'' such as the definition included in section 25B of the Federal Reserve Act?[49]

2. Proposed Definition of Sovereign Entity

Proposed regulation 50.75(b) would set forth a definition of ''sovereign entity'' for purposes of the Clearing Requirement. Under the proposed definition, sovereign entity would mean a central government (including the U.S. government) or an agency, department, or ministry of a central government.[50] The Commission believes this definition limits the exemption to national governments and provides clarity regarding the scope of the counterparties whose transactions would be excluded from the Clearing Requirement, as discussed in the 2012 End-User Exception preamble,[51] as well as the counterparties whose transactions are excluded by statute from the definition of a swap.[52] Under this definition, ''sovereign entity'' would not include state, regional, provincial, or municipal governments.[53] The Commission continues to believe, as it did in 2012, that most of these entities are predominantly engaged in non-banking and non-financial activities related to their core public purposes and functions and therefore are not likely to be ''financial entities'' ineligible to elect an exception from the Clearing Requirement under section 2(h)(7)(C) of the CEA.[54]

Request for Comment. The Commission requests comment on the scope of its proposed definition of sovereign entity. Should the Commission consider adopting an alternate definition for ''sovereign entity?'' If so, what definition should the Commission consider? Should there be criteria for determining if transactions with a sovereign entity should be exempt from the Clearing Requirement and, if so, what criteria would be appropriate?

3. Proposed Definition of International Financial Institution

Proposed regulation 50.76 would define ''international financial institution'' to mean the entities the Commission identified as international financial institutions in the 2012 End-User Exception final rule, the entities to whom DCR issued no-action letters in 2013 and 2017,[55] the Islamic Development Bank,[56] and any other entity that provides financing for national or regional development in which the U.S. government is a shareholder or contributing member.

The Commission believes that an entity may be an international financial institution for purposes of an exemption from the Clearing Requirement if it has the following common qualities: A significant proportion of the entity's shareholders are limited to sovereign governments or other international financial institutions/multilateral development banks; the entity has been granted legal privileges and immunities that are typical of those enjoyed by other international financial institutions/multilateral development banks; the entity is governed by representatives from the public sector; the entity is a not-for-profit entity whose mission is to foster and promote economic development in developing areas; the entity's financing is used to

[46] Commission regulation 23.151 states, in part, that the term financial end user does not include any counterparty that is (i) a sovereign entity; (ii) a multilateral development bank; (iii) The Bank for International Settlements; (iv) an entity that is exempt from the definition of financial entity pursuant to section 2(h)(7)(C)(iii) of the CEA and implementing regulations; (v) an affiliate that qualifies for the exemption from clearing pursuant to section 2(h)(7)(D) of the CEA; or (vi) an eligible treasury affiliate that the Commission exempts from the requirements of §§ 23.150 through 23.161 by rule.

[47] *Id.*

[48] Under part 23 of the Commission's regulations, the Bank for International Settlements is excluded from the term ''financial end user'' for purposes of the uncleared margin rules. Commission regulations 23.154 and 23.155 require calculations of initial and variation margin for counterparties that are either swap entities or financial end users. As such, the Bank for International Settlements is not subject to the uncleared initial or variation margin requirements under part 23. Under proposed regulation 50.75(a), the Bank for International Settlements would be a ''central bank'' and swaps entered into with a central bank would not be subject to the Clearing Requirement. Although the Commission is using different terminology, the Bank for International Settlements would be exempt from requirements under both parts of the Commission's regulations.

[49] Section 25B of the Federal Reserve Act states that the term ''central bank'' includes any foreign bank or banker authorized to perform any one or more of the functions of a central bank. 12 U.S.C. 632.

[50] As with the proposed definition of ''central bank,'' the regulation would clarify that the definition of ''central government'' would include the U.S. government.

[51] 77 FR at 42562.

[52] *See* section 1a(47)(B)(ix) of the CEA.

[53] *Accord* 77 FR at 42562–63 (''A per se exclusion for state and local government entities from the 'financial entity' definition is inappropriate.'').

[54] *Id.* at 42562–63 (explaining that the activities of state and local government entities that might be considered to be in the business of banking or financial in nature under section 2(h)(7)(C)(i)(VIII) ''are likely to be incidental, not primary, activities of those entities.'').

[55] The proposed list of named entities that would be defined as ''international financial institutions'' includes: (1) African Development Bank; (2) African Development Fund; (3) Asian Development Bank; (4) Banco Centroamericano de Integración Económica; (5) Bank for Economic Cooperation and Development in the Middle East and North Africa; (6) Caribbean Development Bank; (7) Corporación Andina de Fomento; (8) Council of Europe Development Bank; (9) European Bank for Reconstruction and Development; (10) European Investment Bank; (11) European Investment Fund; (12) European Stability Mechanism; (13) Inter-American Development Bank; (14) Inter-American Investment Corporation; (15) International Bank for Reconstruction and Development; (16) International Development Association; (17) International Finance Corporation; (18) International Monetary Fund; (19) Islamic Development Bank; (20) Multilateral Investment Guarantee Agency; (21) Nordic Investment Bank; and (22) North American Development Bank.

[56] The Commission is proposing to add the Islamic Development Bank to the current list of international financial institutions in an effort to harmonize the exemptions from required clearing with the exemptions from margin for uncleared swaps requirements. The Islamic Development Bank is included as a multilateral development bank under Commission regulation 23.151, and thus is exempt from margin requirements. In addition, this development bank is similarly situated to those entities the Commission identified in the 2012 End-User Exception final rule and in DCR no-action letters.

support activities that are in the public interest, *i.e.,* socioeconomic development projects; the entity uses swaps only to hedge credit, interest rate, or currency risk incurred during financing activities in support of their public interest missions; swaps are not used for speculative purposes; and the entity satisfies other considerations deemed important by the Commission, including the public interest. The Commission believes these qualities appropriately describe international financial institutions for purposes of an exemption from the Clearing Requirement.

The proposed definition of international financial institution includes a provision ''23'' encompassing ''any other entity that provides financing for national or regional development in which the U.S. government is a shareholder or contributing member.'' The Commission believes that if the U.S. government is a shareholder or member of an international financial institution that provides financing for national or regional development activities that are in the public interest, then that entity is an international financial institution that should be exempt from the Clearing Requirement. The Commission preliminarily believes that this definition is appropriate because it would allow newly established entities meeting this criterion to be included as international financial institutions enumerated in proposed regulation 50.76.

In addition, the Commission believes that this proposed rule will encourage international comity and continued cross-border cooperation with authorities abroad, particularly with EU authorities in light of the several EU institutions that would be exempted under the proposed rule. An important example of the Commission's cooperation with EU authorities is the 2016 announcement by the CFTC and the European Commission regarding requirements for cross-border central counterparties.[57] The principles of international comity counsel mutual respect for the important interests of foreign sovereigns.[58]

Request for Comment. Are there additional public interest considerations the Commission should consider? Should the factors listed be important in determining eligibility for a clearing exemption? Are there additional international financial institutions that should be added to the list? The Commission seeks comment regarding this definition.

4. Proposed Exemption from the Clearing Requirement for Swap Transactions With Central Banks, Sovereign Entities, and International Financial Institutions

Proposed regulation 50.75 would exempt from the Clearing Requirement swaps entered into with central banks and sovereign entities. Similarly, proposed regulation 50.76 would exempt from the Clearing Requirement swaps entered into with international financial institutions. Under new proposed regulations 50.75 and 50.76 the swap must be reported to an SDR to qualify for the exemption.

The new proposed regulations 50.75 and 50.76 would codify the Commission's determination that based on considerations of comity and in keeping with the traditions of the international system, swaps entered into with central banks (including BIS), sovereign entities, and international financial institutions should be treated like swaps entered into with the Federal Reserve Banks, the Federal Government, or a Federal agency and should not be subject to the Clearing Requirement. The Commission preliminarily believes these entities only use swaps to mitigate credit, interest rate, or currency risk incurred during financing activities in support of the public interest and the public good. As such, the Commission believes that it is appropriate to exclude swaps entered into with these entities from the Clearing Requirement. This exemption therefore would allow swaps entered into by these entities to be treated in the same manner as the statutory exclusion for a Federal Reserve Bank, the Federal Government, or a Federal agency that is backed by the full faith and credit of the United States.[59]

Consistent with the other exemptions in effect under current Commission regulation 50.5,[60] new proposed regulations 50.75 and 50.76 would exempt swaps entered into by a central bank, a sovereign entity, or an international financial institution from the Clearing Requirement, provided that the swap is reported to a swap data repository pursuant to part 45 of the Commission's regulations.[61]

Request for Comment. The Commission requests comment on the proposed exemption from the Clearing Requirement for swaps entered into with central banks, sovereign entities, and international financial institutions. The Commission requests comment on the use of swaps by central banks, sovereign entities, and international financial institutions, including quantitative data where available.

B. Data Related to Swaps Entered Into by Central Banks, Sovereign Entities, and International Financial Institutions

The Commission has gathered preliminary data regarding the use of swaps by international financial institutions from the Depository Trust & Clearing Corporation's (DTCC's) swap data repository, DTCC Data Repository (DDR). From January 1, 2018 to December 31, 2018, 16 international financial institutions named in proposed regulation 50.76 were counterparties to a swap that was entered into and reported to DDR during that time period. Overall, the 16 international financial institutions entered into approximately 2,500 uncleared interest rate swaps with an estimated total notional value of $220 billion. Of the 16 international financial institutions, four entered into more than one hundred swaps during calendar year 2018. Compared to data that the Commission gathered from DDR during calendar year 2017, the number of international financial institutions entering into interest rate swaps increased from nine to 16, and the total number and total notional value of all uncleared interest rate swaps entered into by the international financial institutions increased from 381 swaps totaling $59.8 billion to approximately 2,500 swaps totaling $220 billion.

[57] On February 10, 2016, the CFTC and the European Commission announced ''A Common Approach for Transatlantic CCPs.'' *See* Press Release and Related Statements, available at *https://www.cftc.gov/PressRoom/PressReleases/cftc_euapproach021016.*

[58] *See* Restatement (Third) of Foreign Relations Law of the United States sec. 403 (Am. Law Inst. 2018) (the Restatement). The Restatement provides that even where a country has a basis for jurisdiction, it should not prescribe law with respect to a person or activity in another country when the exercise of such jurisdiction is unreasonable. *See* Restatement section 403(1). Notably, the Restatement recognizes that, in the exercise of international comity, reciprocity is an appropriate consideration in determining whether to exercise jurisdiction extraterritorially.

[59] The Commission is not proposing to exempt these transactions from the definition of a swap.

[60] Under existing Commission regulation 50.5(a), swaps entered into before July 10, 2010, are exempt from the clearing requirement under Commission regulation 50.2 if reported to a swap data repository pursuant to section 2(h)(5)(A) of the CEA and Commission regulation 46.3(a). Existing Commission regulation 50.5(b) exempts swaps entered into after July 10, 2010, but before the application of the clearing requirement under Commission regulations 50.2 and 50.4 for a particular class of swaps if reported to a swap data repository pursuant to 46.3(a), 45.3 and 45.4 of the Commission's regulations.

[61] In most instances, the central bank, sovereign entity, or international financial institution would not be the reporting counterparty, rather the swap dealer would report the transaction to the SDR.

The Commission is not providing data estimates for swaps entered into by central banks and sovereign entities because it believes that the number of such swaps is likely to be small and could reveal confidential swaps trading and position information. In addition, it is difficult to define a representative set of central banks and sovereign entities for purposes of collecting such data. The Commission invites public comment from affected central banks, sovereign entities, and their counterparties, including the submission of any data or other relevant information.

C. New Compliance Schedule for Subpart B

The Commission implemented the Clearing Requirement through two separate rulemakings: (i) The 2012 Clearing Requirement Determination; and (ii) the 2016 Clearing Requirement Determination. Under each of these final rules, the Commission made the decision to phase-in the compliance requirement. Neither clearing requirement determination required compliance by all market participants for all swaps included in Commission regulation 50.4 on a single date.

1. 2012 Clearing Requirement Determination

In order to facilitate an orderly transition to the new swap clearing regime established by the Dodd-Frank Act, the Commission decided to phase-in the 2012 Clearing Requirement Determination by type of market participant. The Commission adopted a swap clearing requirement compliance schedule in Commission regulation 50.25.[62] Commission regulation 50.25 contains definitions for Category 1 Entities and Category 2 Entities,[63] as well as other terms that are referenced in the implementation section of the 2012 Clearing Requirement Determination.[64] For all interest rate swaps and CDX credit default swaps that were required to be cleared pursuant to the 2012 Clearing Requirement Determination, the applicable implementation schedule was published by the Commission in the final rulemaking preamble. However, the compliance dates were delayed for iTraxx credit default swaps until February 25, 2013, because no DCO offered client clearing.[65] Once client clearing was offered for iTraxx credit default swaps, specified credit default swaps subject to the Clearing Requirement in Commission regulation 50.4(b) were required to be cleared after sixty days. This information was publicized through Commission press releases, but is not reflected in part 50 of the Commission's regulations.

2. 2016 Clearing Requirement Determination

In 2016, the Commission expanded the set of interest rate swaps subject to the Clearing Requirement under Commission regulation 50.4(a) in order to harmonize the CFTC's swap clearing requirement with those in non-U.S. jurisdictions. When the Commission adopted the implementation schedule for the 2016 Clearing Requirement Determination, it elected not to phase-in compliance by the type of market participant and instead phased-in compliance based on when the corresponding non-U.S. jurisdiction's interest rate swap clearing mandate had gone into effect. Under the Commission's 2016 Clearing Requirement Determination, certain categories of interest rate swaps were required to be cleared on the earlier of: (i) 60 calendar days after any person was first required to comply with an analogous clearing requirement that has been adopted by a regulator in a non-U.S. jurisdiction, or (ii) two years after the final rule was published in the **Federal Register**.[66] All swaps that were subject to the Commission's 2016 Clearing Requirement Determination are now required to be cleared and the last compliance date for a category of interest rate swaps under Commission regulation 50.4(a) was October 15, 2018. As in 2012, the compliance schedule was outlined in the preamble discussion, but the compliance dates were not published in the final rule.

In addition, the compliance dates for each category of interest rate swap subject to the expansion under the 2016 Clearing Requirement Determination were based on the product type, and in some cases, the tenor of the swap. For this reason, the Commission believes that publishing the compliance dates in a detailed format will be useful for market participants.

3. New Proposed Regulation 50.26

The Commission seeks to improve transparency and to provide the information about the compliance dates for both of the Commission's Clearing Requirements in one location that will be convenient for market participants to reference. In the new proposed regulation 50.26, the Commission has taken information that was available in different formats and repackaged it in a single table. Earlier press releases provided small pieces of information but did not provide a comprehensive statement of all Clearing Requirement compliance dates. In addition, as detailed above, the Commission's 2016 Clearing Requirement Determination compliance dates were not all published in the final rule. Now that all of the swaps covered in Commission regulation 50.4 have a compliance date, that information can be collected and published in one location in part 50 of the Commission's regulations instead of located in various places throughout the **Federal Register** and on the Commission's website.

The Commission believes that these compliance dates are static and not subject to change. Including a table of compliance dates in the Commission's regulations will be useful for market participants trying to confirm whether their swaps are required to be cleared under the Clearing Requirement or would be considered to be legacy swaps not required to be cleared under regulation 50.5. This codification may be particularly useful for groups, such as the International Organization of Securities Commissions and others, that collect and disseminate such information.[67]

Request for Comment. The Commission requests comment on the proposed table headings and structure included in Table 1 and Table 2 of new proposed regulation 50.26. Are the tables sufficiently clear to communicate the specific dates on which compliance with the Clearing Requirement is required? If not, why not? Do market participants think that any additional compliance date information should be included in the tables or in this new section?

D. Technical Amendment to Subpart C for Banks, Savings Associations, Farm Credit System Institutions, and Credit Unions

In addition to proposing to codify exemptions from the Clearing Requirement, the Commission is proposing technical amendments to subpart C of part 50 to reorganize the

[62] Swap Transaction Compliance and Implementation Schedule: Clearing Requirement Under Section 2(h) of the CEA, 77 FR 44441 (Jul. 30, 2012).

[63] Commission regulation 50.25(a).

[64] 2012 Clearing Requirement Determination at 74319–21.

[65] CFTC Press Release No. 6521–13 (Feb. 25, 2013), available at *https://www.cftc.gov/PressRoom/PressReleases/pr6521-13.*

[66] *Id.* at 71227–28.

[67] *E.g.,* the International Organization of Securities Commissions' Information Repository for Central Clearing Requirements for OTC Derivatives, available at *https://www.iosco.org/publications/?subsection=information_repositories.*

subpart so that market participants find it easier to read and identify applicable regulations. The Commission preliminarily believes that re-codifying the existing regulatory provision for certain banks, savings associations, farm credit system institutions, and credit unions (together, small financial institutions) with a new numbered section and heading specifically will facilitate swap counterparties' use and understanding of part 50 of the Commission's regulations.

The current exemption for small financial institutions is located in paragraph (d) of Commission regulation 50.50 without any heading or other demarcation. Commission regulation 50.50 generally excepts non-financial entities from the Clearing Requirement if they satisfy certain conditions. In the final paragraph of Commission regulation 50.50, there is a separate category of relief for small financial institutions that are exempt from the definition of ''financial entity'' if the financial institution satisfies certain requirements. In order to promote transparency about the operation of exceptions and exemptions to the Clearing Requirement, the Commission is proposing to separate the small financial institutions exemption from the non-financial entities exception. The Commission views this as a non-substantive change, and the minor changes to the text of the regulations would serve only to clarify and update the requirements in light of current swap reporting conventions, specifically related to SDR reporting by entities eligible for an exception or exemption from the Clearing Requirement.

Current Commission regulation 50.50(d) limits the exemption to certain small financial institutions with two key definitional requirements. First, the small financial institution must be an entity that satisfies the statutory requirements under Commission regulation 50.50(d)(1). Second, the small financial institution must have total assets of $10 billion or less on the last day of such entity's most recent fiscal year. The Commission is leaving these requirements unchanged and has moved these requirements to new proposed regulation 50.53(a) and 50.53(b), respectively.

New proposed regulation 50.53 will require small financial institutions to satisfy the same reporting requirements in Commission regulation 50.50(b) that apply to entities qualifying for the exemption under Commission regulation 50.50(d) currently. The Commission believes that the language proposed in new regulation 50.53(c) incorporates the requirements under Commission regulation 50.50(b) by reference and matches the current structure of a similar provision requiring exempt cooperatives to report specific information by reference to Commission regulation 50.50(b).[68] The Commission is proposing a small difference in new regulation 50.53(c) that does not match the language in 50.50(b) exactly. Proposed regulation 50.53(c) would make it clear that rather than ''provide'' the information to a SDR, the entity electing the exception will be expected to ''report'' the information to a SDR. In a few places in the new regulatory text of proposed regulation 50.53(c), the Commission is using the word ''report'' or ''cause to be reported'' instead of ''provide'' or ''cause to be provided.'' The Commission believes the words ''provide'' and ''report'' have similar meaning, but the word ''report'' is more precise in this instance. The word ''report'' is the predominant term used under Commission regulations in part 45 and this term aligns with the obligations that parties are required to comply with under Commission regulations 45.3 and 45.4. Under this proposal, the Commission does not intend to alter how swap counterparties currently subject to Commission regulation 50.50(d) comply with the reporting provisions under existing Commission regulation 50.50(b). The Commission believes the obligations of banks and other entities eligible for relief from the Clearing Requirement under Commission regulation 50.50(d) would not change under new proposed regulation 50.53.

Under Commission regulation 50.50(b) electing entities are given the option to provide information to a registered SDR or to provide the information directly to the Commission. The Commission believed such flexibility was necessary during the initial implementation phase of the Dodd-Frank Act. Now that SDRs have been established and are a reliable infrastructure resource, the Commission is proposing to eliminate the option for small financial institutions to submit information directly to the Commission. The Commission processes data from the SDRs and uses this data to monitor and track compliance with the Clearing Requirement. This change to require reporting of information through an SDR would further the Commission's goals of improving the quality and comprehensiveness of SDR data as well. The Commission notes that it is taking this approach to require reporting directly to SDRs (and not to permit reporting directly to the Commission) for all of the other exemptions for swaps with certain entities under proposed regulations 50.75 through 50.79. The Commission believes that the reporting methods employed by small financial institutions currently would satisfy the requirements in proposed regulation 50.53(c).

Finally, proposed regulation 50.53 includes a paragraph (d) that would require small financial entities to use the swap to hedge or mitigate commercial risk. This requirement is the same as current requirements under Commission regulation 50.50(d) and should not create new or different obligations on small financial institutions electing the exemption from the Clearing Requirement. The Commission reiterates its view that proposed regulation 50.53 would not substantively change the exemption for small financial institutions and is intended to be a clarifying amendment to part 50 of the Commission's regulations.

Request for Comment. The Commission requests comment on whether the proposed changes could materially alter the compliance requirements that exist currently for eligible banks, savings associations, farm credit system institutions, and credit unions.

III. Supplemental Proposal of Proposed Rulemaking for Bank Holding Companies, Savings and Loan Holding Companies, and Community Development Financial Institutions

A. Background on Prior Proposal and Supplemental Proposal

In August 2018, the Commission proposed regulations that would exempt from the Clearing Requirement, set forth in section 2(h)(1) of the CEA, certain swaps entered into by certain bank holding companies, savings and loan holding companies, and CDFIs.[69] Under the CEA, these entities are not eligible for an exemption from the definition of ''financial entity'' for purposes of an exemption from the Clearing Requirement that is afforded banks, savings associations, farm credit systems, and credit unions with total assets of $10 billion or less.[70]

The proposed amendments to the Commission's regulations under part 50 would exempt from the Clearing Requirement a swap entered into to

[68] Commission regulation 50.51(c) states that an exempt cooperative that elects the exemption provided in that section shall comply with the requirements of Commission regulation 50.50(b).

[69] *See* 2018 Proposal.

[70] *See* sections 2(h)(1)(A) and 2(h)(7)(A) of the CEA.

hedge or mitigate commercial risk if one of the counterparties to the swap is either (a) a bank holding company or savings and loan holding company, each having no more than $10 billion in consolidated assets, or (b) a CDFI transacting in certain types and quantities of interest rate swaps. The proposed amendments would codify two no-action letters issued by DCR in 2016.[71] As the Commission noted in the 2018 Proposal, it believes that codifying both of these staff no-action letters would be consistent with the policy rationale behind the exemption from the Clearing Requirement that the Commission granted for swaps entered into by banks, savings associations, farm credit institutions, and credit unions in the 2012 End-User Exception final rule.[72]

The 2018 Proposal received only one comment on the proposal.[73] In light of the proposed restructuring of part 50 of the Commission's regulations, the Commission is requesting additional comments on the 2018 Proposal, is proposing minor revisions to the rule text for CDFIs, and is proposing technical revisions as described below.[74]

B. Changes to the Proposed Rule Text for CDFIs and Technical Revisions to Proposed Rule Text for Bank Holding Companies and Savings and Loan Holding Companies

As proposed in August 2018, swaps entered into with certain bank holding companies, savings and loan holding companies, and CDFIs would be exempt from the Clearing Requirement. The 2018 Proposal would have amended Commission regulation 50.5 by adding definitions for CDFI, bank holding company, and savings and loan holding company to Commission regulation 50.5(a), and by adding the conditions of the exemption in new subparts (e) and (f). In this supplemental proposal, the Commission is proposing to include the definitions and exemptions in a new subpart D of part 50 as Commission regulations 50.77, 50.78, and 50.79 as described further below.

1. CDFIs

In this supplemental proposal, the Commission is proposing to make the following clarifying revisions to the regulations that would exempt certain interest rate swaps and forward rate agreements entered into by CDFIs from the Clearing Requirement. First, these regulations, if adopted, would be set forth in regulation 50.77 rather than in Commission regulation 50.5. Second, the 2018 Proposal's definition of the term ''community development financial institution'' in proposed regulation 50.5(a) remains unchanged, but would be codified as regulation 50.77(a).[75] Third, proposed regulation 50.5(f) would become new regulation 50.77(b). The supplemental proposal would clarify the rule by adding the statutory authority for the exemption to the rule text and referencing the subpart. New proposed regulation 50.77(b) would state in relevant part that ''a swap entered into by a community development financial institution shall not be subject to the clearing requirement of section 2(h)(1)(A) of the [CEA] and this part if. . . .''

The supplemental proposal includes a technical change to the 2018 Proposal's reference to Commission regulation 50.2 that was included in previously proposed regulation 50.5(f)(2). Under the supplemental proposal, newly proposed regulation 50.77(b)(1) would reference Commission regulation 50.4(a) and state that the swap is a U.S. dollar denominated interest rate swap in the fixed-to-floating class or the forward rate agreement class of swaps that would otherwise be subject to the clearing requirement under § 50.4(a).

In the 2018 Proposal, under previously proposed regulation 50.5(f)(3), swaps entered into by a CDFI would not be subject to the Clearing Requirement of section 2(h)(1)(A) of the CEA, and Commission regulation 50.2, if the total aggregate notional value of all swaps entered into by the community development financial institution during the twelve-month calendar is less than or equal to $200,000,000. To clarify the exemption, the Commission proposes to revise the language in proposed regulation 50.77(b)(2) to state the total aggregate notional value of all swaps entered into by the community development financial institution during the 365 calendar days prior to the day of execution of the swap is less than or equal to $200,000,000. Likewise, previously proposed regulation 50.5(f)(4) would be codified as proposed regulation 50.77(b)(3), and the Commission is proposing to include a technical revision that changes the time frame from ''within a twelve-month calendar year'' to ''within a period of 365 calendar days.'' The Commission believes both revisions from measuring in months to calendar days are more accurate descriptions of the scope of the requirement and is consistent with the current requirement in Commission regulation 50.50(b)(2). Commission regulation 50.50(b)(2) states that reporting for certain entities that are eligible for an exception to the Clearing Requirement will remain effective for ''365 days following the date of such reporting.'' The Commission believes this minor technical change will improve internal consistency within part 50 of the Commission's regulations by measuring time periods in days in all relevant places rather than using days in some regulations and months in other regulations.

Previously proposed regulation 50.5(f)(1) would remain the same except it would be presented in this supplemental proposal as proposed regulation 50.77(b)(4). Previously proposed regulation 50.5(f)(5) would be presented by this proposal as proposed regulation 50.77(b)(5) with a technical change to the text such that the regulation would change from ''the swap is used to hedge or mitigate commercial risk, as defined under § 50.50(c) of this part'' and would instead state that the swap is used to hedge or mitigate commercial risk as provided in paragraph (c) of § 50.50.

2. Bank Holding Companies and Savings and Loan Holding Companies

In this supplemental proposal, the Commission is proposing to have separate regulations for exemptions for swaps with bank holding companies and savings and loan holding companies. Under the 2018 Proposal, the proposed definitions for a bank holding company and a savings and loan holding company were included in existing regulation 50.5(a). This supplemental proposal would move the definition for bank holding company to

[71] CFTC Letter No. 16–01 (request from the American Bankers Association) and CFTC Letter No. 16–02 (request from a coalition of CDFIs).

[72] *See* 2018 Proposal at 44004. *See also* End-User Exception Final Rule, 77 FR at 42590–91.

[73] American Bankers Association (Oct. 22, 2018). The American Bankers Association supported the 2018 Proposal to codify CFTC Letters No. 16–01 and 16–02, and also recommended that the Commission treat all non-swap dealer or non-major swap participant banks, bank holding companies, savings associations, and savings and loan holding companies as end-users and exempt all of these entities from the Clearing Requirement.

[74] Procedurally, this supplemental proposal is not a replacement or withdrawal of the 2018 Proposal. Unless specifically amended in this release, all regulatory provisions proposed in the 2018 Proposal remain under active consideration for adoption as final rules. The Commission welcomes comment on both the 2018 Proposal and this supplemental proposal.

[75] New proposed regulation 50.77(a) would state that, for the purposes of that section, the term community development financial institution means an entity that satisfies the definition in section 103(5) of the Community Development Banking and Financial Institutions Act of 1994, and is certified by the U.S. Department of Treasury's Community Development Financial Institution Fund as meeting the requirements set forth in 12 CFR 1805.201(b).

proposed regulation 50.78(a) and savings and loan holding company to proposed regulation 50.79(b).

Previously proposed regulation 50.5(e) would become proposed regulations 50.78(b) for bank holding companies and 50.79(b) for savings and loan holding companies. The supplemental proposal would clarify the text for each exemption by adding the statutory authority for the exemption to the text of the regulation and referencing the subpart.

This supplemental proposal would renumber previously proposed regulation section and paragraphs 50.5(e)(1), (2), and (3) as new proposed regulation section and paragraphs 50.78(b)(1), (2), and (3) for bank holding companies, and new proposed regulation section and paragraphs 50.79(b)(1), (2), and (3) for savings and loan holding companies. The regulations remain unchanged from the text of the 2018 Proposal with the exception of the technical change to paragraph (b)(3) of each proposed regulation. Those paragraphs would now state that the swap is used to hedge or mitigate commercial risk as provided in paragraph (c) of § 50.50.

C. Updated Data Regarding the Use of Swaps by CDFIs, Bank Holding Companies, and Savings and Loan Holding Companies

When the Commission considered its 2018 Proposal, it included data about the number of swaps entered into by entities that would be eligible to elect the proposed exemption from the Clearing Requirement. The Commission is updating some of the data from DDR that it considered in the 2018 Proposal. All interest rate swaps data included in this section was reported to DDR as events-based data and was analyzed by Commission staff.[76] This information about past swaps activity is not used as a predictive measure of future swaps activity, but rather, it is included here to provide context about the current use of uncleared swaps by the entities discussed in this proposal.

In the most recent calendar year—between January 1, 2018 and December 31, 2018—eight different CDFIs entered into interest rate swaps and four of those entities entered into more than one swap. During this one year period, CDFIs entered into thirteen uncleared interest rate swaps with an aggregate notional value of almost $84 million. According to this data, more CDFIs entered into uncleared interest rate swaps during the calendar year 2018 than during the previous 18-month time period between January 2017 and June 2018.[77] At the same time, the aggregate notional value of all uncleared interest rate swaps entered into during calendar year 2018 ($83.9 million) was less than the aggregate notional value of swaps entered into by CDFIs during the 18-month time period between January 2017 and June 2018 ($251.6 million).

The Commission is also updating the data regarding the number of swaps entered into by eligible bank holding companies and savings and loan holding companies. Between January 1, 2018 and December 31, 2018, eleven bank holding companies executed 18 interest rate swaps with an aggregate notional value of $152.5 million.[78] Seven of these bank holding companies entered into more than one swap during the calendar year 2018. In calendar year 2018 the aggregate notional value of all swaps entered into by eligible bank holding companies increased substantially ($152.5 million in 2018 compared to $68.6 million in 2017), but this increase was also the result of more eligible bank holding companies entering into uncleared interest rate swaps.

The increase in the number of uncleared swaps entered into by these entities may be the result of better information and more awareness by eligible entities about the relief provided under CFTC Letter Nos. 16–01 and 16–02, or it may be the result of different economic or market conditions. The data demonstrates that these entities have an ongoing interest in entering into uncleared swaps and likely would benefit from the Commission's proposal to codify the relief currently afforded under CFTC staff letters.

Request for Comment. The Commission requests comment on all aspects of the new proposed regulations, including the specific revisions to the proposed rule text as well as the technical amendments to the proposed regulations. In addition, the Commission requests additional comment on the use of swaps by CDFIs, bank holding companies, and savings and loan holding companies, including quantitative data where available.

IV. Commission's Section 4(c) Authority

Section 4(c)(1) of the CEA authorizes the Commission to promote responsible economic or financial innovation and fair competition by exempting any transaction or class of transactions, including swaps, from any of the provisions of the CEA (subject to exceptions not relevant here).[79] In enacting CEA section 4(c)(1), Congress noted that the goal of the provision is to give the Commission a means of providing certainty and stability to existing and emerging markets so that financial innovation and market development can proceed in an effective and competitive manner.[80] Section 4(c)(2) of the CEA further provides that the Commission may not grant exemptive relief unless it determines that: (A) The exemption is consistent with the public interest and the purposes of the CEA; and (B) the transaction will be entered into solely between ''appropriate persons'' and the exemption will not have a material adverse effect on the ability of the Commission or any contract market to discharge its regulatory or self-regulatory responsibilities under the CEA.

The Commission believes that it is consistent with the public interest and the purposes of the CEA to exempt from the Clearing Requirement swaps entered into with central banks, sovereign entities, and international financial institutions, as discussed above. In 2012, the Commission stated its view that transactions with central banks, sovereign entities, and certain international financial institutions should be exempted from clearing on the basis of comity and in keeping with

[76] This section does not include credit default swaps data because the relief provided to CDFIs does not extend to credit default swaps and there was no credit default swaps activity reported by eligible bank holding companies or savings and loan holding companies in the time periods analyzed.

[77] During an earlier 18-month time period, between January 1, 2017 and June 29, 2018, three CDFIs executed interest rate swaps: One executed two swaps with an aggregate notional value of $5.6 million; another executed three swaps with an aggregate notional value of $116 million; and another executed three swaps with an aggregate notional value of $130 million.

[78] During the previous year, between January 1, 2017 and December 31, 2017, one bank holding company executed ten interest rate swaps with an aggregate notional value of $43.6 million, and a second bank holding company executed one interest rate swap with a notional value of $25 million.

[79] Pursuant to section 4(c)(1) of the CEA, in order to promote responsible economic or financial innovation and fair competition, the Commission by rule, regulation, or order, after notice and opportunity for hearing, may (on its own initiative or on application of any person) exempt any agreement, contract, or transaction (or class thereof) that is otherwise subject to subsection (a) of CEA section 4(c), either unconditionally or on stated terms or conditions or for stated periods and either retroactively or prospectively, or both, from any of the requirements of subsection (a) of CEA section 4(c), or from any other provision of the CEA. The Commission is proposing to promulgate this exemptive rule pursuant to sections 4(c)(1) and 8a(5) of the CEA.

[80] H. R. Rep. No. 102–978, 102d Cong. 2d Sess. at 81 (Oct. 2, 1992), *reprinted in* 1992 U.S.C.C.A.N. 3179, 3213.

the traditions of the international system. The Commission continues to believe, as it did in 2012, that based on canons of statutory construction and considerations of comity, and in keeping with the traditions of the international system, foreign governments and central banks should not be subject to section 2(h)(1) of the CEA.[81] With respect to international financial institutions, the member governments generally have majority control and governance over the entities. The Commission therefore continues to believe that an exemption is appropriate because in a real sense, an international financial institution is not separable from its government owners. Codifying the Commission's 2012 determination through a section 4(c) exemption will provide further clarity to market participants. As with the other exemptions from the Clearing Requirement, the Commission reminds the counterparties that these swaps exempted from the Clearing Requirement by this proposal and the existing 2012 determination must be reported to an SDR. The Commission also believes it is appropriate to exempt swaps entered into with international financial institutions because these entities serve an important public policy purpose.

The Commission believes that the specific amendments to exempt swaps entered into by central banks, sovereign entities, and certain international financial institutions, as well as the previously approved proposal to exempt certain swaps entered into by bank holding companies, savings and loan holding companies, and CDFIs from the Clearing Requirement would be available to only ''appropriate persons.'' Section 4(c)(3) of the CEA includes within the term ''appropriate person'' a number of specified categories of persons, including any governmental entity (including the United States, any state, or any foreign government) or political subdivision thereof, or any multinational or supranational entity or any instrumentality, agency, or department of any of the foregoing.[82]

The Commission preliminarily believes that central banks, sovereign entities, and international financial institutions are appropriate persons within the scope of section 4(c)(3)(H) of the CEA. The Commission notes that these entities would also be considered eligible contract participants (ECPs) as set forth in section 1a(18)(A)(vii) of the CEA. The Commission continues to believe that eligible bank holding companies, savings and loan holding companies, and CDFIs are ECPs pursuant to section 1a(18)(A)(i) of the CEA.[83]

Given that only ECPs are permitted to enter into uncleared swaps, and that the ECP definition is generally more restrictive than the comparable elements of the enumerated ''appropriate person'' definition, there is no risk that a non-ECP or a person who does not satisfy the requirements for an ''appropriate person'' could enter into an uncleared swap using the proposed exemptions from the Clearing Requirement. For purposes of this proposal, the Commission believes that the class of persons eligible to rely on the proposed exemptions that would be codified in new proposed regulations 50.75 through 50.79 will be limited to ''appropriate persons'' within the scope of section 4(c) of the CEA.

The Commission believes that the applicable central banks, sovereign entities, and international financial institutions have been relying on the language in the preamble exempting their swap transactions from the Clearing Requirement since issuance of the 2012 End-User Exception final rule. The Commission is not aware of any increase in counterparty risk attributable to affected entities' reliance on the 2012 Commission determination and the subsequent staff no-action letters. The proposed exemptions from the Clearing Requirement are limited in scope and, as described further below, the Commission will continue to have access to information regarding the swaps subject to this exemption because they will be reported to an SDR.[84] The Commission notes that the proposed exemptions are intended to be consistent with the Commission's determination set forth in the 2012 End-User Exception final rule and would not limit the applicability of any CEA provision or Commission regulation to any person or transaction except as provided in the proposed rulemaking. In addition, the Commission retains its special call, anti-fraud, and anti-evasion authorities, which will enable it to adequately discharge its regulatory responsibilities under the CEA. The Commission therefore preliminarily believes the exemption would not have a material adverse effect on the ability of the Commission to discharge its regulatory responsibilities under the CEA.

For the reasons described in this proposal, the Commission believes it would be appropriate and consistent with the public interest to adopt new proposed regulations 50.75, 50.76, 50.77, 50.78, and 50.79.

Request for Comment. The Commission requests general comments regarding the proposal and on whether it should exercise its authority under section 4(c) of the CEA, including whether the proposed exemptions promote the public interest. Additionally, the Commission requests comment on whether the proposed exemptions provide certainty and stability to existing and emerging markets so that financial innovation and market development can proceed in an effective and competitive manner.

V. Proposed Rules Do Not Effect Margin Requirements for Uncleared Swaps

Under Commission regulation 23.150(b)(1), the margin requirements for uncleared swaps under part 23 of the Commission's regulations do not apply to a swap if the counterparty qualifies for an exception from clearing under section 2(h)(7)(A) and implementing regulations.[85] Commission regulation 23.150(b) was added to the final margin rules after the Terrorism Risk Insurance Program Reauthorization Act of 2015 (TRIPRA)[86] amended section 731 of the Dodd-Frank Act by adding section 4s(e)(4) to the CEA to provide that the initial and variation margin requirements will not apply to an uncleared swap in which a non-financial entity (including a small financial institution and a captive finance company) qualifies for an exception under section 2(h)(7)(A) of the CEA, as well as two exemptions from the clearing requirement that are not relevant in this context.[87]

The proposed rules are not implementing section 2(h)(7)(A) of the CEA. The Commission, pursuant to its

[81] The Commission continues to believe that transactions with sovereign wealth funds or similar entities should not be exempt from the Clearing Requirement because these entities generally act as investment funds. *See* 77 FR at 42562, n.18 (''The foregoing rationale and considerations do not apply to sovereign wealth funds or similar entities due to the predominantly commercial nature of their activities.'').

[82] Section 4(c)(3)(H) of the CEA.

[83] 2018 Proposal, at 44008.

[84] The Commission notes that uncleared swaps with a counterparty that is subject to the CEA and Commission regulations with regard to such swaps would still be required to comply with the CEA and Commission regulations as they pertain to uncleared swaps.

[85] Commission regulation 23.150(b)(1).

[86] Public Law 114–1, 129 Stat. 3.

[87] Commission regulation 23.150(b)(2) provides that certain cooperative entities that are exempt from the Commission's clearing requirement pursuant to section 4(c)(1) authority also are exempt from the initial and variation margin requirements. None of the entities included in this proposal is a cooperative that would meet the conditions in Commission regulation 23.150(b)(2). In addition, Commission regulation 23.150(b)(3), which pertains to affiliated entities, does not apply in this context.

4(c) authority (as discussed above), is proposing to exempt swaps entered into by central banks, sovereign entities, and international financial institutions, as well as eligible bank holding companies, savings and loan holding companies, and CDFIs from the Clearing Requirement. The Commission is not proposing to exclude these entities from the ''financial entity'' definition of section 2(h)(7)(C) of the CEA.

For the reasons stated above, the new proposed rules 50.75 through 50.79 do not implicate any of the provisions of section 4s(e)(4) of the CEA or Commission regulation 23.150.[88]

VI. Related Matters

A. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) requires federal agencies to consider whether the regulations they propose will have a significant economic impact on a substantial number of small entities and, if so, provide a regulatory flexibility analysis on the impact.[89] The Commission previously has established certain definitions of small entities to be used in evaluating the impact of its regulations on small entities in accordance with the RFA.[90] The proposed regulations would not affect any small entities as that term is used in the RFA. The proposed rule would affect specific counterparties to an uncleared swap: Central banks, sovereign entities, and international financial institutions. Sections 2(e) and 5(d)(11)(A) of the CEA provide that only ECPs may enter into uncleared swaps.[91] The Commission has previously stated that ECPs, by the nature of the definition, should not be considered small entities for RFA purposes.[92] Because ECPs are not small entities, and persons not meeting the definition of ECP may not conduct transactions in uncleared swaps, the Commission need not conduct a regulatory flexibility analysis respecting the effect of these proposed rules on ECPs.

Accordingly, the Chairman, on behalf of the Commission, hereby certifies pursuant to 5 U.S.C. 605(b) that the proposed regulations will not have a significant economic impact on a substantial number of small entities.

B. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (PRA)[93] imposes certain requirements on Federal agencies, including the Commission, in connection with their conducting or sponsoring any collection of information, as defined by the PRA. This proposed rulemaking would not impose a new collection of any information or any new recordkeeping requirements from any persons or entities and would not require approval of the Office of Management and Budget (OMB) under the PRA.[94] The Commission invites public comment on its determination that no additional recordkeeping or information collection requirements, or changes to existing collection requirements, would result from the proposed rulemaking.

C. Cost-Benefit Considerations

1. Statutory and Regulatory Background

Section 15(a) of the CEA requires the Commission to consider the costs and benefits of its actions before promulgating a regulation under the CEA or issuing certain orders.[95] Section 15(a) further specifies that the costs and benefits shall be evaluated in light of the following five broad areas of market and public concern: (1) Protection of market participants and the public; (2) efficiency, competitiveness, and financial integrity; (3) price discovery; (4) sound risk management practices; and (5) other public interest considerations (collectively referred to herein as the Section 15(a) Factors).

The baseline for the Commission's consideration of the costs and benefits of this proposed rulemaking is the existing statutory and regulatory framework under which any swap subject to the Clearing Requirement would be required to be cleared by central banks, sovereign entities, and international financial institutions. As a practical matter, however, the regulatory baseline has been affected by Commission action and staff no-action relief such that central banks, sovereign entities, international financial institutions, and their counterparties have relied on Commission statements in the 2012 End-User Exception final rule and staff no-action relief when entering into swaps that otherwise would be subject to the Clearing Requirement.

This proposal would codify current practice by exempting certain swaps with central banks (including BIS), sovereign entities, and international financial institutions from the Clearing Requirement. The Commission believes that the entities whose swaps would be exempted by this proposing release are the same entities governed by the determination set forth in the 2012 End-User Exception final rule and the entities that received staff no-action relief.[96] Consequently, the Commission expects that the actual costs and benefits of the proposed rule, as realized in the market, may not be as significant as compared to the baseline.

The Commission notes that this proposal would not change the eligibility to enter into uncleared swaps for any entity that has been relying on the 2012 End-User Exception final rule determination and has not been clearing swaps subject to the Clearing Requirement. Entities named in the 2012 End-User Exception final rule[97] may continue to rely on the Commission's statement that they are not subject to section 2(h)(1) of the CEA and may choose not to clear a swap subject to the Clearing Requirement. The Commission has endeavored to assess the expected costs and benefits of the proposed rule in quantitative terms where possible. Where estimation or quantification is not feasible, the Commission has provided its discussion in qualitative terms.

The Commission notes that the consideration of costs and benefits below is based on the understanding that the markets function internationally, with many transactions involving U.S. firms taking place across international boundaries; with some Commission registrants being organized outside of the United States; with leading industry members typically conducting operations both within and outside the United States; and with industry members commonly following substantially similar business practices wherever located. Where the Commission does not specifically refer to matters of location, the below

[88] The Commission believes that the proposed rules do not affect the margin rules for entities that are supervised by the prudential regulators. The prudential regulators' rules contain provisions that are identical to Commission regulation 23.150. *See* Margin and Capital Requirements for Covered Swap Entities, 80 FR 74916, 74923 (Nov. 20, 2015).

[89] 5 U.S.C. 601 *et seq.*

[90] 47 FR 18618 (Apr. 30, 1982).

[91] Section 2(e) of the CEA limits non-ECPs to executing swap transactions on DCMs and section 5(d)(11)(A) of the CEA requires all DCM transactions to be cleared. Accordingly, the two provisions read together only permit ECPs to execute uncleared swap transactions.

[92] *See* 66 FR 20740, 20743 (Apr. 25, 2001).

[93] 44 U.S.C. 3501 *et seq.*

[94] The applicable collection of information is ''Swap Data Recordkeeping and Reporting Requirements,'' OMB control number 3038–0096. Parties wishing to review the CFTC's information collections may do so at *www.reginfo.gov,* at which OMB maintains an inventory aggregating each of the CFTC's currently approved information collections, as well as the information collections that presently are under review.

[95] Section 15(a) of the CEA.

[96] The one modification to the proposed list is to include the Islamic Development Bank as an additional entity that would be eligible for the exemption under proposed regulation 50.76(b). The Islamic Development Bank is not subject to the Commission's margin requirements for uncleared swaps.

[97] 77 FR at 42561–62 n.14.

discussion of costs and benefits refers to the effects of the proposed rule on all activity subject to the proposed and amended regulations, whether by virtue of the activity's physical location in the United States or by virtue of the activity's connection with or effect on U.S. commerce under section 2(i) of the CEA.[98] In particular, the Commission notes that some entities affected by this proposed rulemaking are located outside of the United States.

In the sections that follow, the Commission considers: (1) The costs and benefits of the exemption to the Clearing Requirement for entities that meet the definitions of central bank, sovereign entity, and international financial institution, as identified in this proposed rule; and (2) the impact of the exemption for central banks, sovereign entities, and international financial institutions on the Section 15(a) Factors.

The Commission is including by reference the costs and benefits of the supplemental proposal to exempt swaps entered into by certain bank holding companies, savings and loan holding companies, and CDFIs.[99]

2. Consideration of the Costs and Benefits of the Commission's Action

a. Costs

New proposed regulations 50.75 and 50.76 would exempt swaps entered into with central banks, sovereign entities, and certain international financial institutions from the Clearing Requirement. By exempting transactions with central banks, sovereign entities, and international financial institutions from the Clearing Requirement, the Commission recognizes that the benefits of central clearing will not accrue to swaps entered into by these entities. However, as discussed above, Congress exempted swaps with the Federal Reserve Banks, the Federal Government, and Federal agencies expressly backed by the full faith and credit of the United States by excluding any agreement, contract, or transaction entered into by these entities from the definition of a swap and consequently from the Clearing Requirement.[100] The proposed amendments to part 50 of the Commission's regulations would codify the Commission's 2012 End-User Exception final rule determination that based on considerations of comity, and in keeping with the traditions of the international system, swaps entered into with certain central banks (including BIS), sovereign entities, and international financial institutions should be treated like swaps entered into with the Federal Reserve Banks, the Federal Government, or a Federal agency and should not be subject to the Clearing Requirement.

The primary cost of the proposed amendments is, therefore, that swaps entered into with central banks, sovereign entities, and international financial institutions would not be subject to the Clearing Requirement.

In general, the principal risk to the financial system that central clearing seeks to address is counterparty credit risk. A DCO manages this risk by collecting initial and variation margin from its clearing members. The collection of margin allows a DCO to mitigate the possibility of a default, and to cover the losses due to default of a clearing member in many cases. By exempting transactions with these entities from the Clearing Requirement, the Commission recognizes that the risk-mitigating benefits of clearing will not attach to those transactions. In addition, the Commission is also aware that some of these entities may be covered under the Commission's uncleared margin requirements. In that case, the cost that may result from not requiring clearing these transactions may be mitigated. To the extent that these entities do not pay margin, there is a possibility of increased counterparty risk.

Request for Comment. The Commission requests comment, including any available quantitative data and analysis, on the risks resulting from the proposed amendment to the Clearing Requirement.

b. Benefits

Set against these costs are the benefits of allowing these entities to enter into swaps at a potentially lower cost. Specifically, the Commission believes that central banks (including BIS), sovereign entities, and international financial institutions would benefit from an exemption because project financing and risk management transactions with these entities would not be subject to required clearing or have the added expense of required clearing. The Commission believes that the cost savings achieved through an exemption from the Clearing Requirement would allow these entities to enter into more public service projects in furtherance of their missions.

The Commission believes there is an important benefit associated with the proposed amendments. If foreign governments (sovereign entities), central banks, or international financial institutions of which foreign governments are a member were subjected to regulation by the Commission in connection with their swaps, foreign regulators could treat the Federal Government, Federal Reserve Banks, or international financial institutions of which the United States is a member in a similar manner. The Commission expects that the proposed exemption from the Clearing Requirement will mean that if any of the Federal Government, Federal Reserve Banks, or international financial institutions of which the United States is a member were to engage in swaps in foreign jurisdictions, the actions of those entities with respect to those transactions would not be subject to foreign regulation. By allowing swaps entered into with central banks (including BIS), sovereign entities, and international financial institutions to be treated like swaps entered into with the Federal Reserve Banks, the Federal Government, and Federal agencies, the Commission is facilitating similar treatment for transactions by foreign regulators.[101]

The Commission believes that most of the central banks, sovereign entities, and international financial institutions that would benefit from the proposed regulations would benefit from relief from the uncleared margin requirements under part 23 of the Commission's regulations, as well. For entities that would be required to comply with the Commission's uncleared margin requirements, their benefit from an exemption would be mitigated. Actual benefits may be less than expected if counterparties to eligible swaps by central banks, sovereign entities, and international financial institutions choose to voluntarily clear the swaps instead of electing an exemption from the Clearing Requirement.

As a practical matter, we believe that the entities for which the proposed rule would apply currently are not clearing all of their swaps subject to the Clearing

[98] Section 2(i) of the CEA.

[99] The Commission notes that the costs and benefits of the proposed changes in the 2018 Proposal were discussed in that release and remain under active consideration by the Commission. As the Commission noted in the 2018 Proposal, bank holding companies, savings and loan holding companies, and CDFIs are likely to have limited swap exposure, in terms of value and number of swaps. These entities would have relatively modest contributions to systemic risk and are expected to have some degree of protection against default because they would be required to indicate how they will meet financial obligations associated with uncleared swaps. Bank holding companies and savings and loan holding companies will benefit from an exemption from the Clearing Requirement through internal accounting efficiencies and all of the entities would benefit from the cost savings of not having to clear a swap. *See* 2018 Proposal at 44009–11.

[100] Section 1a(47)(B)(ix) of the CEA.

[101] *See* 77 FR at 42562.

Requirement.[102] In that regard, the practical effect of the proposed exception is to provide regulatory certainty. The Commission believes that regulatory certainty would reduce the legal costs faced by these entities.

Request for Comment. The Commission requests comment on the benefits, such as the expected cost savings to these entities, of codifying the Commission's determination and staff no-action relief that swaps entered into with central banks, sovereign entities, or international financial institutions should be exempt from the Clearing Requirement.

3. Section 15(a) Factors

The discussion that follows supplements the related cost and benefit considerations addressed in the preceding section and addresses the overall effect of the proposed rule in terms of the factors set forth in section 15(a) of the CEA.

a. Protection of Market Participants and the Public

Section 15(a)(2)(A) of the CEA requires the Commission to evaluate the costs and benefits of a proposed regulation in light of considerations of protection of market participants and the public. The Commission considers the costs and benefits of the proposed exemption from the Clearing Requirement in light of its responsibility for determining which swaps should be required to be cleared. In recognition of the significant risk-mitigating benefits of central clearing, Congress amended the CEA to direct the Commission review all swaps that are offered for clearing by DCOs to determine whether such swaps should be required to be cleared. In developing the proposed rule, the Commission was cognizant that in enacting the Dodd-Frank Act, Congress excluded from the definition of a swap any agreement, contract, or transaction wherein the counterparty is a Federal Reserve Bank, the Federal Government, or a Federal agency that is expressly backed by the full faith and credit of the United States. In so doing, Congress determined that swaps with the Federal Reserve Banks, the Federal Government, and Federal agencies are not subject to the Clearing Requirement. Under this proposal, the Commission would be extending similar treatment for swap transactions with central banks and sovereign entities, as discussed above.

The Commission notes that the proposed exemption from the Clearing Requirement means that counterparties entering into swaps with certain entities would not have the protection afforded by central clearing through posting initial margin, daily variation margin payments, and other types of collateralization and risk mitigation associated with central clearing. The Commission, however, believes Congress would not have excluded the swaps entered into by the Federal Reserve Bank, the Federal Government, and Federal agencies from the definition of a swap if such transactions would pose a significant risk to market participants and the public. In proposing a similar exemption from the Clearing Requirement for swaps with central banks and sovereign entities, as discussed above, the Commission is applying a similar rationale.

As discussed above, the Commission believes that international comity would support similar regulatory treatment for swap transactions with central banks, sovereign entities, and international financial institutions. The Commission preliminarily believes these entities generally enter into limited swap transactions in support of their public interest missions. As such, while an exemption from the Clearing Requirement does result in reduced protection for counterparties, the Commission believes that the exemption for transactions with these entities would not pose a significant risk to market participants and the public.

b. Efficiency, Competitiveness, and Financial Integrity of Swap Markets

Section 15(a)(2)(B) of the CEA requires the Commission to evaluate the costs and benefits of a proposed regulation in light of efficiency, competitiveness, and financial integrity considerations. The Commission believes that proposed regulations 50.75 and 50.76 would lower the cost of using swaps for central banks, sovereign entities, and international financial institutions, and in that sense, make trading more efficient. A potential effect of the proposal would be to increase liquidity in swap markets, as entering into swaps would be less costly and these entities may engage in increased trading, which may in turn potentially improve the competitiveness of swaps markets for all participants. The Commission notes that to the extent that transactions with these counterparties are currently not cleared because of reliance on the Commission statements made in the 2012 End-User Exception final rule and DCR no-action letters, the impact of the proposed exemption on the efficiency, competitiveness, and financial integrity of the swap markets may be mitigated.

c. Price Discovery

Section 15(a)(2)(C) of the CEA requires the Commission to evaluate the costs and benefits of a proposed regulation in light of price discovery considerations. The Commission preliminarily believes that the proposed rule would not have a significant impact on price discovery. Typically more liquidity supports greater price discovery as more participants enter the market and/or more trading occurs. To the extent that markets become more liquid, price discovery could improve. In regard to transparency of prices, swap transactions, whether cleared or uncleared and regardless of the counterparty, are required by section 2(a)(13)(G) of the CEA to be reported to a swap data repository.

d. Sound Risk Management Practices

Section 15(a)(2)(D) of the CEA requires the Commission to evaluate the costs and benefits of a proposed regulation in light of sound risk management practices. The Commission believes that by eliminating the costs associated with clearing for central banks, sovereign entities, and international financial institutions, the Commission is facilitating the use of swaps by these entities. To the extent that these entities use swaps to hedge existing risk, then the Commission preliminarily believes the proposed exemption from the clearing requirement will enable better risk management.

e. Other Public Interest Considerations

Section 15(a)(2)(E) of the CEA requires the Commission to evaluate the costs and benefits of a proposed regulation in light of other public interest considerations. As discussed above, the Commission believes that public interest and international comity support the exemption from the Clearing Requirement for swaps with central banks, sovereign entities, and international financial institutions. The Commission believes that the public interest mission of these entities will be served by lowering the cost of financing in support of their public interest missions. The Commission requests comment on other public interest considerations raised by the proposed exemption from the Clearing Requirement for swaps with central banks, sovereign entities, and international financial institutions.

[102] The Commission reviewed data from January 1, 2018 to December 31, 2018 that was reported to DDR and found that 16 international financial institutions entered into approximately 2,500 uncleared interest rate swaps with an estimated total notional value of $220 billion. Three international financial institutions elected to clear a portion of their interest rate swaps.

D. General Request for Comment

The Commission requests comment on all aspects of the costs and benefits relating to the proposed exemption of these transactions from the Clearing Requirement. The Commission requests that commenters provide any data or other information that would be useful in estimating the quantifiable costs and benefits of this rulemaking.

E. Antitrust Considerations

Section 15(b) of the Act requires the Commission to take into consideration the public interest to be protected by the antitrust laws and endeavor to take the least anticompetitive means of achieving the objectives of the Act, as well as the policies and purposes of the Act, in issuing any order or adopting any Commission rule or regulation (including any exemption under section 4(c) or 4c(b)), or in requiring or approving any bylaw, rule, or regulation of a contract market or registered futures association established pursuant to section 17 of the Act.[103] The Commission believes that the public interest to be protected by the antitrust laws is generally to protect competition. The Commission requests comment on whether the proposal implicates any other specific public interest to be protected by the antitrust laws.

The Commission has considered the proposal to determine whether it is anticompetitive and has preliminarily identified no anticompetitive effects. The Commission requests comment on whether the proposal is anticompetitive and, if it is, what the anticompetitive effects are.

Because the Commission has preliminarily determined that the proposal is not anticompetitive and has no anticompetitive effects, the Commission has not identified any less anticompetitive means of achieving the purposes of the Act. The Commission requests comment on whether there are less anticompetitive means of achieving the relevant purposes of the Act that would otherwise be served by adopting the proposal.

List of Subjects in 17 CFR Part 50

Business and industry, Clearing, Cooperatives, Reporting requirements, Swaps.

For the reasons discussed in the preamble, the Commodity Futures Trading Commission proposes to amend 17 CFR chapter I as set forth below:

PART 50—CLEARING REQUIREMENT AND RELATED RULES

■ 1. The authority citation for part 50 is revised to read as follows:

Authority: 7 U.S.C. 2(h), 6(c), and 7a–1 as amended by Pub. L. 111–203, 124 Stat. 1376.

■ 2. Revise the subpart B heading to read as follows:

Subpart B—Clearing Requirement Compliance Schedule and Compliance Dates

■ 3. Add § 50.26 to read as follows:

§ 50.26 Swap clearing requirement compliance dates.

(a) *Compliance dates for interest rate swap classes.* The compliance dates for swaps that are required to be cleared under § 50.4(a) are specified in the table below.

TABLE 1

Swap asset class	Swap class subtype	Currency and floating rate index	Stated termination date range	Clearing requirement compliance date
Interest Rate Swap	Fixed-to-Floating ...	Euro (EUR) EURIBOR	28 days to 50 years.	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Fixed-to-Floating ...	Sterling (GBP) LIBOR	28 days to 50 years.	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Fixed-to-Floating ...	U.S. Dollar (USD) LIBOR	28 days to 50 years.	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Fixed-to-Floating ...	Yen (JPY) LIBOR	28 days to 50 years.	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Fixed-to-Floating ...	Australian Dollar (AUD) BBSW	28 days to 30 years.	All entities December 13, 2016.
Interest Rate Swap	Fixed-to-Floating ...	Canadian Dollar (CAD) CDOR	28 days to 30 years.	All entities July 10, 2017.
Interest Rate Swap	Fixed-to-Floating ...	Hong Kong Dollar (HKD) HIBOR	28 days to 10 years.	All entities August 30, 2017.
Interest Rate Swap	Fixed-to-Floating ...	Mexican Peso (MXN) TIIE–BANXICO	28 days to 21 years.	All entities December 13, 2016.
Interest Rate Swap	Fixed-to-Floating ...	Norwegian Krone (NOK) NIBOR	28 days to 10 years.	All entities April 10, 2017.

[103] Section 15(b) of the CEA.

TABLE 1—Continued

Swap asset class	Swap class subtype	Currency and floating rate index	Stated termination date range	Clearing requirement compliance date
Interest Rate Swap	Fixed-to-Floating	Polish Zloty (PLN) WIBOR	28 days to 10 years.	All entities April 10, 2017.
Interest Rate Swap	Fixed-to-Floating	Singapore Dollar (SGD) SOR–VWAP	28 days to 10 years.	All entities October 15, 2018.
Interest Rate Swap	Fixed-to-Floating	Swedish Krona (SEK) STIBOR	28 days to 15 years.	All entities April 10, 2017.
Interest Rate Swap	Fixed-to-Floating	Swiss Franc (CHF) LIBOR	28 days to 30 years.	All entities October 15, 2018.
Interest Rate Swap	Basis	Euro (EUR) EURIBOR	28 days to 50 years.	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Basis	Sterling (GBP) LIBOR	28 days to 50 years.	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Basis	U.S. Dollar (USD) LIBOR	28 days to 50 years.	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Basis	Yen (JPY) LIBOR	28 days to 30 years.	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Basis	Australian Dollar (AUD) BBSW	28 days to 30 years.	All entities December 13, 2016.
Interest Rate Swap	Forward Rate Agreement.	Euro (EUR) EURIBOR	3 days to 3 years	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Forward Rate Agreement.	Sterling (GBP) LIBOR	3 days to 3 years	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Forward Rate Agreement.	U.S. Dollar (USD) LIBOR	3 days to 3 years	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Forward Rate Agreement.	Yen (JPY) LIBOR	3 days to 3 years	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Interest Rate Swap	Forward Rate Agreement.	Polish Zloty (PLN) WIBOR	3 days to 2 years	All entities April 10, 2017.
Interest Rate Swap	Forward Rate Agreement.	Norwegian Krone (NOK) NIBOR	3 days to 2 years	All entities April 10, 2017.
Interest Rate Swap	Forward Rate Agreement.	Swedish Krona (SEK) STIBOR	3 days to 3 years	All entities April 10, 2017.
Interest Rate Swap	Overnight Index Swap.	Euro (EUR) EONIA	7 days to 2 years	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.

TABLE 1—Continued

Swap asset class	Swap class subtype	Currency and floating rate index	Stated termination date range	Clearing requirement compliance date
			2 years + 1 day to 3 years.	All entities December 13, 2016.
Interest Rate Swap	Overnight Index Swap.	Sterling (GBP) SONIA	7 days to 2 years	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
			2 years + 1 day to 3 years.	All entities December 13, 2016.
Interest Rate Swap	Overnight Index Swap.	U.S. Dollar (USD) FedFunds	7 days to 2 years	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
			2 years + 1 day to 3 years.	All entities December 13, 2016.
Interest Rate Swap	Overnight Index Swap.	Australian Dollar (AUD) AONIA–OIS	7 days to 2 years	All entities December 13, 2016.
Interest Rate Swap	Overnight Index Swap.	Canadian Dollar (CAD) CORRA–OIS	7 days to 2 years	All entities July 10, 2017.

(b) *Compliance dates for credit default swap classes.* The compliance dates for swaps that are required to be cleared under § 50.4(b) are specified in the table below.

TABLE 2

Swap asset class	Swap class subtype	Indices	Tenor	Clearing requirement compliance date
Credit Default Swap	North American untranched CDS indices.	CDX.NA.IG	3Y, 5Y, 7Y, 10Y	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Credit Default Swap	North American untranched CDS indices.	CDX.NA.HY	5Y	Category 1 entities March 11, 2013. All non-Category 2 entities June 10, 2013. Category 2 entities September 9, 2013.
Credit Default Swap	European untranched CSD indices	iTraxx Europe	5Y, 10Y	Category 1 entities April 26, 2013. Category 2 entities July 25, 2013. All non-Category 2 entities October 23, 2013.
Credit Default Swap	European untranched CSD indices	iTraxx Europe Crossover.	5Y	Category 1 entities April 26, 2013. Category 2 entities July 25, 2013. All non-Category 2 entities October 23, 2013.
Credit Default Swap	European untranched CSD indices	iTraxx Europe HiVol.	5Y	Category 1 entities April 26, 2013. Category 2 entities July 25, 2013. All non-Category 2 entities October 23, 2013.

■ 4. Revise the subpart C heading to read as follows:

Subpart C—Exceptions and Exemptions from the Clearing Requirement

§ 50.50 [Amended]

■ 5. Amend § 50.50 as follows:

■ a. Revise the section heading; and

■ b. Remove and reserve paragraph (d).

The revision reads as follows:

§ 50.50 Non-financial end-user exception to the clearing requirement.

§ 50.51 [Amended]

■ 6. Revise the § 50.51 heading to read as follows:

§ 50.51 Cooperatives exempt from the clearing requirement.

§ 50.52 [Amended]

■ 7. Revise the § 50.52 heading to read as follows:

§ 50.52 Affiliated entities exempt from the clearing requirement.

■ 8. Add § 50.53 to read as follows:

§ 50.53 Banks, savings associations, farm credit system institutions, and credit unions exempt from the clearing requirement.

For purposes of section 2(h)(7)(A) of the Act, a person that is a ''financial entity'' solely because of section 2(h)(7)(C)(i)(VIII) shall be exempt from the definition of ''financial entity'' and is eligible to elect the exception to the clearing requirement under § 50.50, if such person:

(a) Is organized as a bank, as defined in section 3(a) of the Federal Deposit Insurance Act, the deposits of which are insured by the Federal Deposit Insurance Corporation; a savings association, as defined in section 3(b) of the Federal Deposit Insurance Act, the deposits of which are insured by the Federal Deposit Insurance Corporation; a farm credit system institution chartered under the Farm Credit Act of 1971; or an insured Federal credit union or State-chartered credit union under the Federal Credit Union Act; and

(b) Has total assets of $10,000,000,000 or less on the last day of such person's most recent fiscal year;

(c) Reports, or causes to be reported, the swap to a swap data repository pursuant to §§ 45.3 and 45.4 of this chapter, and reports, or causes to be reported, all information as provided in paragraph (b) of § 50.50 to a swap data repository; and

(d) Is using the swap to hedge or mitigate commercial risk as provided in paragraph (c) of § 50.50.

■ 9. Add subpart D to read as follows:

Subpart D—Swaps Not Subject to the Clearing Requirement

Sec.

50.75 Swaps entered into by central banks or sovereign entities.
50.76 Swaps entered into by international financial institutions.
50.77 Interest rate swaps entered into by community development financial institutions.
50.78 Swaps entered into by bank holding companies.
50.79 Swaps entered into by savings and loan holding companies.

§ 50.75 Swaps entered into by central banks or sovereign entities.

Swaps entered into by a central bank or sovereign entity shall be exempt from the clearing requirement of section 2(h)(1)(A) of the Act and this part if reported to a swap data repository pursuant to §§ 45.3 and 45.4 of this chapter.

(a) For the purposes of this section, the term *central bank* means a reserve bank or monetary authority of a central government (including the Board of Governors of the Federal Reserve System or any of the Federal Reserve Banks) or the Bank for International Settlements.

(b) For the purposes of this section, the term *sovereign entity* means a central government (including the U.S. government), or an agency, department, or ministry of a central government.

§ 50.76 Swaps entered into by international financial institutions.

(a) Swaps entered into by an international financial institution shall be exempt from the clearing requirement of section 2(h)(1)(A) of the Act and this part if reported to a swap data repository pursuant to §§ 45.3 and 45.4 of this chapter.

(b) For purposes of this section, the term *international financial institution* means:

(1) African Development Bank;
(2) African Development Fund;
(3) Asian Development Bank;
(4) Banco Centroamericano de Integración Económica;
(5) Bank for Economic Cooperation and Development in the Middle East and North Africa;
(6) Caribbean Development Bank;
(7) Corporación Andina de Fomento;
(8) Council of Europe Development Bank;
(9) European Bank for Reconstruction and Development;
(10) European Investment Bank;
(11) European Investment Fund;
(12) European Stability Mechanism;
(13) Inter-American Development Bank;
(14) Inter-American Investment Corporation;
(15) International Bank for Reconstruction and Development;
(16) International Development Association;
(17) International Finance Corporation;
(18) International Monetary Fund;
(19) Islamic Development Bank;
(20) Multilateral Investment Guarantee Agency;
(21) Nordic Investment Bank;
(22) North American Development Bank; and
(23) Any other entity that provides financing for national or regional development in which the U.S. government is a shareholder or contributing member.

§ 50.77 Interest rate swaps entered into by community development financial institutions.

(a) For the purposes of this section, the term *community development financial institution* means an entity that satisfies the definition in section 103(5) of the Community Development Banking and Financial Institutions Act of 1994, and is certified by the U.S. Department of the Treasury's Community Development Financial Institution Fund as meeting the requirements set forth in 12 CFR 1805.201(b).

(b) A swap entered into by a community development financial institution shall not be subject to the clearing requirement of section 2(h)(1)(A) of the Act and this part if:

(1) The swap is a U.S. dollar denominated interest rate swap in the fixed-to-floating class or the forward rate agreement class of swaps that would otherwise be subject to the clearing requirement under § 50.4(a);

(2) The total aggregate notional value of all swaps entered into by the community development financial institution during the 365 calendar days prior to the day of execution of the swap is less than or equal to $200,000,000;

(3) The swap is one of ten or fewer swap transactions that the community development financial institution enters into within a period of 365 calendar days;

(4) One of the counterparties to the swap reports the swap to a swap data repository pursuant to §§ 45.3 and 45.4 of this chapter, and reports all information as provided in paragraph (b) of § 50.50 to a swap data repository; and

(5) The swap is used to hedge or mitigate commercial risk as provided in paragraph (c) of § 50.50.

§ 50.78 Swaps entered into by bank holding companies.

(a) For purposes of this section, the term *bank holding company* means an entity that is organized as a bank holding company, as defined in section 2 of the Bank Holding Company Act of 1956.

(b) A swap entered into by a bank holding company shall not be subject to the clearing requirement of section 2(h)(1)(A) of the Act and this part if:

(1) The bank holding company has aggregated assets, including the assets of all of its subsidiaries, that do not exceed $10,000,000,000 according to the value of assets of each subsidiary on the last day of each subsidiary's most recent fiscal year;

(2) One of the counterparties to the swap reports the swap to a swap data

repository pursuant to §§ 45.3 and 45.4 of this chapter, and reports all information as provided in paragraph (b) of § 50.50 to a swap data repository; and

(3) The swap is used to hedge or mitigate commercial risk as provided in paragraph (c) of § 50.50.

§ 50.79 Swaps entered into by savings and loan holding companies.

(a) For purposes of this section, the term *savings and loan holding company* means an entity that is organized as a savings and loan holding company, as defined in section 10 of the Home Owners' Loan Act of 1933.

(b) A swap entered into by a savings and loan holding company shall not be subject to the clearing requirement of section 2(h)(1)(A) of the Act and this part if:

(1) The savings and loan holding company has aggregated assets, including the assets of all of its subsidiaries, that do not exceed $10,000,000,000 according to the value of assets of each subsidiary on the last day of each subsidiary's most recent fiscal year;

(2) One of the counterparties to the swap reports the swap to a swap data repository pursuant to §§ 45.3 and 45.4 of this chapter, and reports all information as provided in paragraph (b) of § 50.50 to a swap data repository; and

(3) The swap is used to hedge or mitigate commercial risk as provided in paragraph (c) of § 50.50.

Issued in Washington, DC, on April 17, 2020, by the Commission.

Christopher Kirkpatrick,

Secretary of the Commission.

Note: The following appendices will not appear in the Code of Federal Regulations.

Appendices to Swap Clearing Requirement Exemptions—Commission Voting Summary, Chairman's Statement, and Commissioners' Statements

Appendix 1—Commission Voting Summary

On this matter, Chairman Tarbert and Commissioners Quintenz, Behnam, Stump, and Berkovitz voted in the affirmative. No Commissioner voted in the negative.

Appendix 2—Statement of Support of Chairman Heath P. Tarbert

I am pleased to support today's proposal to amend the CFTC's Part 50 rules, which implement the swap clearing requirement of section 2(h)(1) of the Commodity Exchange Act (the ''Clearing Requirement''). The proposed Part 50 amendments would create new regulations 50.75 and 50.76, which would codify existing exemptions from the Clearing Requirement for swaps entered into with certain central banks, sovereign entities, and international financial institutions.[1]

Separately, today's proposal would create new regulations 50.77, 50.78, and 50.79, which would exempt from the Clearing Requirement certain swaps entered into by small bank holding companies, savings and loan holding companies, and community development financial institutions.[2] The proposal also provides a compliance schedule setting forth all the past compliance dates for the 2012 and 2016 swap clearing requirement rules and contemplates certain technical amendments to various other provisions within Part 50.

Together, these amendments to the Clearing Requirement would clarify existing exemptions for banks, savings associations, farm credit systems, and credit units with total assets under $10 billion.[3] While these entities are small, they play outsized roles in supporting the U.S. economy. These are not Wall Street banks, but primarily local institutions that support American communities, businesses, and families. Clarifying their relief from the Clearing Requirement advances the CFTC's strategic goal of regulating the derivatives markets to promote the interests of all Americans.[4]

In addition, today's proposed amendments to the Clearing Requirement will significantly reduce costs and regulatory burdens for entities that pose little or no systemic risk to the United States—*i.e.,* foreign governmental institutions on the one hand, and small domestic lenders on the other. By codifying existing exemptions, the Commission will give certainty to market participants by etching their clearing exemptions—now fragmented among various no-action letters—into the text of our Part 50 rules. Doing so is especially important in these challenging times: More than ever, certainty will help our market participants continue to perform their important functions. Today's proposed amendments to the Clearing Requirement take an important step in that direction.

Appendix 3—Statement of Support of Commissioner Brian D. Quintenz

In March 2018, I articulated my approach to our current regulatory relationship with our European counterparts in light of their refusal to stand by or re-affirm their 2016 commitments in the CFTC's and European Commission's common approach to the regulation of cross-border central counterparties (CCPs) (CFTC–EC CCP Agreement).[1] Specifically, I believe that the absence of the agreement's re-affirmation in the European Market Infrastructure Regulation 2.2 (EMIR 2.2) directly implied the agreement's abrogation.[2] I therefore vowed that I would either object to or vote against any relief provided to, or requested by, European Union authorities until the agreement's clarity was restored. Since that time, I have consistently voted against, or objected to, any regulation or relief that provides special accommodations to European entities, including the proposed exemption from margin requirements for the European Stability Mechanism (ESM) that the Commission seeks to finalize today.[3]

[1] The majority of the entities covered by the proposed rule were previously identified in the preamble to the 2012 End-User Exception final rule as entities that should not be subject to the Clearing Requirement. *See* End-User Exception to the Clearing Requirement for Swaps, 77 FR 42560 (Jul. 19, 2012). Four international financial institutions covered by the proposed amendment separately obtained staff no-action letters concerning the clearing requirement. *See* CFTC Letter No. 13–25 (June 10, 2013) (providing no-action relief to the Corporación Andina de Fomento); CFTC Letter No. 17–57 (Nov. 7, 2017) (providing no-action relief to Banco Centroamericano de Integración Económica); CFTC Letter No. 17–59 (Nov. 7, 2017) (providing no-action relief to the North American Development Bank); and CFTC Letter No. 17–58 (Nov. 7, 2017) and CFTC Letter No. 19–23 (Oct. 16, 2019) (providing no-action relief to the European Stability Mechanism).

[2] In 2018, the Commission proposed to exempt these entities from the Clearing Requirement, but today we are supplementing that earlier proposal with technical amendments to the rule text, and we are soliciting additional public comment. *See* Amendments to Clearing Exemption for Swaps Entered Into by Certain Bank Holding Companies, Savings and Loan Holding Companies, and Community Development Financial Institutions, 83 FR 44001 (Aug. 29, 2018).

[3] *See* proposed new regulations 50.77, 50.78, and 50.79.

[4] *See* Remarks of CFTC Chairman Heath P. Tarbert to the 35th Annual FIA Expo 2019 (Oct. 30, 2019), available at *https://www.cftc.gov/PressRoom/SpeechesTestimony/opatarbert2* (outlining the CFTC's strategic goals).

[1] Keynote Address of Commissioner Brian Quintenz before FIA Annual Meeting, Boca Raton, Florida (March 14, 2018), *https://www.cftc.gov/PressRoom/SpeechesTestimony/opaquintenz9;* and Joint Statement from CFTC Chairman Timothy Massad and European Commissioner Jonathan Hill, CFTC and the European Commission: Common approach for transatlantic CCPs (Feb. 10, 2016), *https://www.cftc.gov/PressRoom/PressReleases/pr7342-16.*

[2] The proposed implementation of EMIR 2.2 by ESMA is available at, *https://www.esma.europa.eu/press-news/esma-news/esma-consults-tiering-comparable-compliance-and-fees-under-emir-22.*

[3] Dissenting Statement by Commissioner Brian Quintenz before the Open Commission Meeting: FBOT Registration (Nov. 5, 2019), *https://www.cftc.gov/PressRoom/SpeechesTestimony/*

However, the unprecedented devastating economic and social impacts of COVID–19 across the globe warrant a reprieve from that position. In the United States, financial regulators have acted swiftly, decisively, and boldly to mitigate economic disruptions and support market liquidity, including providing regulatory relief where necessary. I am very proud of the CFTC's decisive response to the COVID–19 pandemic, which promoted the full functioning of derivatives markets despite the extraordinary challenges facing exchanges, clearinghouses, and market intermediaries as a result of social distancing.[4] I know the Commission, under the strong leadership of Chairman Heath P. Tarbert, is committed to providing any additional relief necessary to ensure that U.S. markets remain accessible.

Our European counterparts are engaged in the same epic struggle as we are to lessen the extraordinary economic and social harms of this pandemic. Although I remain committed to ensuring the terms of the CFTC-EC CCP Agreement are ultimately upheld, I also recognize that issue is one facet of a much broader, deeper bond we share with the European Union—a relationship that has been grounded in goodwill, trust, and partnership. Many of the European institutions affected by the rules and no-action relief before the Commission today are likely to be central to the European Union's COVID–19 economic recovery efforts. As a result, I believe it is appropriate to support the items before the Commission today, which, by providing relief from CFTC clearing and margin requirements, may bolster the ability of EU institutions to provide critical financial assistance to their economies, businesses, and citizens.

For example, the European Commission, ESM, and European Investment Bank (EIB) are working in concert to take unprecedented actions at the European level to complement national measures to mitigate the impacts of COVID–19.[5] The ESM has many economic tools at its disposal, including making loans to Eurozone member states, purchasing the bonds of Eurozone members, providing precautionary credit lines that can be drawn upon if needed, and directly recapitalizing financial institutions.[6]

Similarly, the EIB, the lending arm of the European Union, and the European Investment Fund (EIF), which specializes in finance for small and medium sized businesses, are also working together to respond to COVID–19. Together, the EIB and the EIF have proposed a plan to provide immediate financing to combat the health and economic effects of the pandemic.[7] Each of these EU institutions may seek to enter into swaps subject to the CFTC's clearing or uncleared margin requirements in order to hedge the risks associated with these lending and investment activities. Accordingly, I support today's measures that provide relief from those requirements, thereby freeing up additional capital that can be immediately deployed in the European economy.

When the present hardship caused by COVID–19 abates, I look forward to re-engaging with our European counterparts on the critical issue of the oversight of U.S. CCPs. I believe the possibility still exists for a successful implementation of EMIR 2.2 that fully respects the CFTC's ultimate authority over U.S. CCPs, and I am committed to doing everything in my power to achieve this outcome.

Amendments to Swap Clearing Requirement Exemptions Under Part 50

I am pleased to support this proposal, which codifies existing relief, from the Commission's requirement that certain commonly traded interest rate swaps and credit default swaps be cleared following their execution.[8] The new exemptions could be elected by several classes of counterparties that may enter into these swaps, namely: *Sovereign nations; central banks;* ''*international financial institutions*'' of which sovereign nations are members; *bank holding companies,* and *savings and loan holding companies,* whose assets total no more than $10 billion; and *community development financial institutions* recognized by the U.S. Treasury Department. Today's proposal notes that many of these entities have actually relied on existing relief, electing not to clear swaps that are generally subject to the clearing requirement.

I strongly support the policy of international ''comity'' described in the proposal, recognizing that sovereign nations and their instrumentalities should generally not be subject to the Commission's regulations. I trust that by proposing this relief, the United States, the Federal Reserve, and other U.S. government instrumentalities will receive the same treatment in foreign jurisdictions. As noted above, this policy is timely in light of the current projects the ESM, the EIB, and the EIF are currently undertaking in response to the pandemic. I am pleased that the Commission can provide flexibility to these entities at this time when entering into swaps with U.S. swap dealers. To this end, I also support the decision of the Division of Clearing and Risk to extend the current, time-limited no-action relief provided to the ESM[9] pending the finalization of the amendments to part 50. I note that the EIB, EIF, other international financial institutions, central banks, and sovereign entities currently have relief that is not time-limited.[10]

As for the bank holding companies, savings and loan holding companies, and community development financial institutions that would be provided relief pursuant to this proposal, I am hopeful that the Commission will ultimately finalize this relief, which it first proposed for these entities in 2018.[11] However, I note that these entities currently have relief pursuant to no-action letters issued in 2016 that have no expiration dates.[12]

Final Rule Excluding the European Stability Mechanism From CFTC Margin Requirements for Uncleared Swaps

I support today's final rule that would exempt a swap between the European Stability Mechanism and a swap dealer

quintenzstatement110519; Dissenting Statement by Commissioner Quintenz to the Proposed Exclusion for the European Stability Mechanism from the Commission's Margin Requirements for Uncleared Swaps (Oct. 16, 2019), *https://www.cftc.gov/PressRoom/SpeechesTestimony/quintentzstatement101619;* Statement of Commissioner Brian Quintenz on Staff No-Action Relief for Eurex Clearing AG (December 20, 2018), *https://www.cftc.gov/PressRoom/SpeechesTestimony/quintenzstatement122018.*

[4] Statement of CFTC Commissioner Brian Quintenz on Current Market Dynamics and Commission Actions Related to COVID–19 (March 18, 2020), *https://www.cftc.gov/PressRoom/SpeechesTestimony/quintenzstatment031820.*

[5] *The time for solidarity in Europe is now—a concerted European financial response to the corona-crisis, https://www.esm.europa.eu/blog/time-solidarity-europe-concerted-european-financial-response-corona-crisis* (April 2, 2020).

[6] European Stability Mechanism, Lending Toolkit, *https://www.esm.europa.eu/assistance/lending-toolkit.*

[7] Coronavirus outbreak: EIB Group's response to the pandemic, *https://www.eib.org/en/about/initiatives/covid-19-response/index.htm* (April 9, 2020).

[8] The swap clearing requirement is codified in part 50 of the Commission's regulations (17 CFR part 50).

[9] CFTC Letter 19–23 (Oct. 16, 2019).

[10] End-User Exception to the Clearing Requirement for Swaps, 77 FR 42560, 42561–62 (Jul. 19, 2012).

[11] Amendments to Clearing Exemption for Swaps Entered Into by Certain Bank Holding Companies, Savings and Loan Holding Companies, and Community Development Financial Institutions, 83 FR 44001 (Aug. 29, 2018).

[12] CFTC Letters 16–01 and –02 (both Jan. 8, 2016).

from the Commission's margin requirements applicable to uncleared swaps. This rule is premised on the same policy of international comity referenced in today's proposed exemption from the swap clearing requirement. I would like to highlight that the EIB, EIF, and the other international financial institutions referenced by the proposed exemption from the swap clearing requirement, as well as sovereign entities and central banks, are already exempted from the Commission's margin requirements for uncleared swaps pursuant to Commission regulations.[13] Finally, I am pleased that the Division of Swap Dealer and Intermediary Oversight is today extending previously granted, time-limited no-action relief to the ESM,[14] pending the effective date of today's final rule.

Appendix 4—Statement of Commissioner Dan M. Berkovitz

I support issuing the notice of proposed rulemaking (''Proposal'') to codify certain exemptions from the swap clearing requirement that currently exist through Commission guidance or staff no action relief. Each of the proposed exemptions is consistent with longstanding Commission policy and the Commission's experience in implementing the swap clearing requirement over the past eight years. Codifying these exemptions will provide certainty and transparency for market participants.

First, the Proposal would codify in rule text a list of foreign central banks, sovereign entities at the national level, and international institutions that are currently excepted from the clearing requirement through no action relief or guidance. This codification would provide regulatory certainty that executing the swaps on an uncleared basis will not run afoul of our rules. This certainty benefits not only to the named entities, but also to their counterparties, most of which are swap dealers registered with the Commission. As described in the preamble to the Proposal, it has been the Commission's policy since the adoption of the clearing requirement to exempt these institutions due to considerations of international comity, the reduced risks arising from swaps entered into by these institutions, and the public purposes for which these institutions enter into such swaps.

Second, the Proposal includes a supplemental proposal making technical changes to a 2018 Commission proposal. This proposal would provide clearing exemptions for (i) certain interest rate swaps entered into by community development financial institutions to hedge or mitigate commercial risks, and (ii) for swaps entered into by bank or savings and loan holding companies that each have no more than $10 billion in consolidated assets if they enter into the swaps to hedge or mitigate commercial risks. This supplemental proposal also would codify relief from the clearing requirement currently provided by two no-action letters. Commodity Exchange Act section 2(h)(7)(A) in essence excludes from the clearing requirement banks and savings associations with less than $10 billion in assets to the extent determined by the Commission. Since the Commission has already provided the exemption to individual banks and savings associations,[1] it makes sense to codify this exemption for holding companies for those entities that also have no more than $10 billion in consolidated assets. As described in the preamble, swap data repository data indicates that over the past several years the number and scope of such swaps entered into by these institutions that would be included within these exemptions has been relatively limited.

I commend the staff of the Division of Clearing and Risk for this well developed and drafted Proposal. Providing certainty to market participants is important and the Proposal would do so for the entities involved in the exempted swaps.

[FR Doc. 2020–08603 Filed 5–11–20; 8:45 am]

BILLING CODE 6351–01–P

[13] CFTC regulation 23.151.

[14] CFTC Letter 19–22 (Oct. 16, 2019).

[1] *See* Regulation 50.50(d).

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R09–OAR–2019–0318; FRL–10009–28–Region 9]

Clean Air Plans; 2006 Fine Particulate Matter Nonattainment Area Requirements; San Joaquin Valley, California

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA or ''Agency'') proposes to approve through parallel processing a state implementation plan (SIP) revision submitted by the State of California to meet Clean Air Act (CAA or ''Act'') requirements for the 2006 fine particulate matter ($PM_{2.5}$) national ambient air quality standards (NAAQS or ''standards'') in the San Joaquin Valley Serious nonattainment area. Specifically, the EPA proposes to approve through parallel processing the ''Revision to the California State Implementation Plan for $PM_{2.5}$ Standards in the San Joaquin Valley'' (''$PM_{2.5}$ Prior Commitment Revision'' or ''Revision''). We also propose to find that the State has complied with this commitment.

DATES: Any comments must arrive by June 11, 2020.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R09–OAR–2019–0318, at *https://www.regulations.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*. 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 comment. 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, 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://www.epa.gov/dockets/commenting-epa-dockets.*

FOR FURTHER INFORMATION CONTACT: Rory Mays, Air Planning Office (AIR–2), EPA Region IX, (415) 972–3227, *mays.rory@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document, ''we,'' ''us,'' and ''our'' refer to the EPA.

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I. Background

On October 17, 2006, the EPA strengthened the 24-hour (daily) NAAQS for particles less than or equal to 2.5 micrometers (μm) in diameter ($PM_{2.5}$) by lowering the level from 65 micrograms (μg) per cubic meter (m^3) to 35 μg/m^3.[1] The 24-hour standards are based on a three-year average of 98th percentile 24-hour $PM_{2.5}$ concentrations. The EPA established these standards after considering substantial evidence from numerous health studies demonstrating that serious health effects are associated with exposures to $PM_{2.5}$ concentrations above these levels.

Following promulgation of a new or revised NAAQS, the EPA is required under CAA section 107(d) to designate areas throughout the nation as attaining or not attaining the NAAQS. Effective December 14, 2009, the EPA finalized initial air quality designations for the 2006 $PM_{2.5}$ NAAQS, using air quality monitoring data for the three-year periods of 2005–2007 and 2006–2008.[2] The EPA designated the San Joaquin Valley as a nonattainment area for the 2006 24-hour $PM_{2.5}$ NAAQS.[3] On June 2, 2014, the EPA classified the San Joaquin Valley as a Moderate nonattainment area for these NAAQS, thereby establishing December 31, 2015, as the latest permissible attainment date for the area under section 188(c)(1) of the CAA.[4] Effective February 19, 2016, the EPA reclassified the San Joaquin Valley as a Serious nonattainment area for these NAAQS based on a determination that the area could not practicably attain the NAAQS by the December 31, 2015 Moderate area attainment date.[5]

On August 31, 2016, the EPA approved the State's demonstration that it was impracticable for the San Joaquin Valley to attain the 2006 24-hour $PM_{2.5}$ NAAQS by the December 31, 2015 Moderate area attainment date and related plan elements addressing the Moderate area requirements for the 2006 24-hour $PM_{2.5}$ NAAQS.[6] As part of that action, the EPA approved enforceable commitments by the SJVUAPCD[7] to take specific actions with respect to identified control measures (''rulemaking commitments'') and to achieve specific amounts of direct $PM_{2.5}$ emission reductions from these or substitute measures (''aggregate tonnage commitment'') by 2017.

Upon reclassification as a Serious $PM_{2.5}$ nonattainment area, the San Joaquin Valley became subject to a new statutory attainment date no later than the end of the tenth calendar year following designation (*i.e.,* December 31, 2019). CAA section 188(e) authorizes the EPA to extend the attainment date for a Serious area by up to five years if several statutory conditions are met, including the condition that the State has complied with all requirements and commitments applicable to the area in its implementation plan.

On March 27, 2020, the EPA proposed action on portions of two SIP submissions submitted by CARB to address the Serious nonattainment area plan requirements for the 2006 24-hour $PM_{2.5}$ NAAQS in the San Joaquin Valley.[8] Specifically, the EPA proposed to act on those portions of the following two SIP submissions that pertain to the 2006 24-hour $PM_{2.5}$ NAAQS: The ''2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards,'' adopted by the SJVUAPCD on November 15, 2018, and by CARB on January 24, 2019 (''2018 $PM_{2.5}$ Plan''); and the ''San Joaquin Valley Supplement to the 2016 State Strategy for the State Implementation Plan,'' adopted by CARB on October 25, 2018 (''Valley State SIP Strategy''). We refer to the relevant portions of these SIP submissions collectively as the ''SJV $PM_{2.5}$ Plan'' or ''Plan.'' The SJV $PM_{2.5}$ Plan addresses the Serious area attainment plan requirements for the 2006 24-hour $PM_{2.5}$ NAAQS in the San Joaquin Valley and includes a request under CAA section 188(e) for an extension of the Serious area attainment date for the area for these NAAQS.

As part of that action, the EPA proposed to grant the State's request for extension of the Serious area attainment date from December 31, 2019, to December 31, 2024, based on a proposed conclusion that the State has satisfied the requirements for such extensions in section 188(e) of the Act. The EPA noted, however, that the Agency might reconsider this proposal or deny California's request to extend the attainment date if new information or public comments were to cause the EPA to conclude that the requested extension would not be consistent with the requirements of the Act.[9] Among other things, the EPA proposed to find that the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD or ''District'') had satisfied its prior rulemaking commitments and its aggregate tonnage commitment in the 2012 $PM_{2.5}$ Plan and Supplement.[10]

With respect to the District's aggregate tonnage commitment to achieve 1.9 tpd of direct $PM_{2.5}$ by 2017, the District stated in the 2018 $PM_{2.5}$ Plan that its commitment had been achieved through amendments to Rule 4901 (''Wood Burning Fireplaces and Wood Burning Heaters''), which it adopted in 2014.[11] Similarly, in a letter to the EPA, CARB pointed to an analysis of emissions reductions in the 2014 Rule 4901 Staff Report as demonstrating compliance with the commitment to achieve 1.9 tpd of emissions reductions.[12] Based on this analysis, the EPA proposed to find that the District has complied with the aggregate commitment in the 2012 $PM_{2.5}$ Plan to achieve total emission reductions of 1.9 tpd of direct $PM_{2.5}$ by 2017.[13]

However, the EPA also noted that the 2018 $PM_{2.5}$ Plan included updated emissions inventories for the residential wood burning source category, which differed from previous inventory estimates and showed a 0.86 tpd reduction in winter season direct $PM_{2.5}$ emissions from wood burning devices between 2013 and 2017.[14] We explained that:

> This difference between the emission reductions projected in the 2014 Rule 4901 Staff Report and the emission reductions reflected in the inventories in Appendix C of the 2018 $PM_{2.5}$ Plan appears to be due to an update to emissions inventory methods in 2015–2016. The updated methodology indicates that emissions from this source category are lower than emissions as calculated by the methodology used to develop the emissions inventory in the 2012 $PM_{2.5}$ Plan. The updated methodology is based on a 2014 survey of San Joaquin Valley residents, which provided more representative data regarding fuel usage rates and the number of wood burning devices in use in the District.[15]

In light of the differences between the inventories used as a basis for the commitment and the inventories in the 2018 $PM_{2.5}$ Plan, the EPA sought comment as to whether the State and

[1] 71 **Federal Register** (FR) 61144 (October 17, 2006) and 40 CFR 50.13.

[2] 74 FR 58688 (November 13, 2009).

[3] Id. (codified at 40 CFR 81.305).

[4] 79 FR 31566 (June 2, 2014).

[5] 81 FR 2993 (January 20, 2016).

[6] 81 FR 59876 (August 31, 2016).

[7] The District works cooperatively with the California Air Resources Board (CARB) in preparing attainment plans.

[8] 85 FR 17382 (March 27, 2020); the public comment period closed on April 27, 2020.

[9] 85 FR 17382, 17419.

[10] Id. at 17407–17409.

[11] 2018 $PM_{2.5}$ Plan, Ch. 6, 6–5 to 6–6.

[12] Letter dated February 4, 2020 from Kurt Karperos, Kurt Karperos, Deputy Executive Officer, CARB, to Elizabeth Adams, Air and Radiation Division Director, EPA Region IX, 2–3.

[13] 88 FR 17382, 17409.

[14] 85 FR 17382, 17409. See also 2018 $PM_{2.5}$ Plan, App. C, C–257 and letter dated August 12, 2019, from Richard W. Corey, Executive Officer, CARB, to Mike Stoker, Regional Administrator, EPA Region IX, transmitting ''Attachment: Supplemental Information and Clarifications to 2017 Quantitative Milestones.''

[15] 85 FR 17382, 17409 (internal citations omitted).

District had met the commitment to achieve total emission reductions of 1.9 tpd of direct $PM_{2.5}$ 2017. In response to the proposed finding and request for comment, CARB developed the $PM_{2.5}$ Prior Commitment Revision. The purpose of this revision is to revise the State's aggregate commitment in the 2012 $PM_{2.5}$ Plan to reflect the updated inventories submitted in the 2018 $PM_{2.5}$ Plan.

II. Completeness Review of the $PM_{2.5}$ Prior Commitment Revision

On April 24, 2020, CARB submitted the $PM_{2.5}$ Prior Commitment Revision for parallel processing.[16] Parallel processing refers to a process that utilizes concurrent state and federal proposed rulemaking actions.[17] Generally, the state submits a copy of the proposed regulation or other revisions to the EPA before conducting its public hearing and completing its public comment process under state law. The EPA reviews this proposed state action and prepares a notice of proposed rulemaking under federal law. In some cases, the EPA publishes its notice of proposed rulemaking in the **Federal Register** during the same time frame that the state is holding its own public hearing and public comment process. The state and the EPA then provide for concurrent public comment periods on both the state action and federal action on the initial SIP submission from the state. If, after completing its public comment process and after the EPA's public comment process has run, the state materially changes its final SIP submission to EPA from the initial proposed submission, the EPA evaluates those changes and decides whether to publish another notice of proposed rulemaking in light of those changes or to proceed to taking final action on its proposed action and describe the state's changes in its final rulemaking action. Any final rulemaking action by the EPA will occur only after the state formally adopts and submits its final submission to the EPA.

Section 110(k)(1)(B) of the CAA requires the EPA to determine whether a SIP submission is complete within 60 days of receipt. This section also provides that if the EPA has not affirmatively determined a SIP submission to be complete or incomplete, it will become complete by operation of law six months after the date of submission. The EPA's SIP completeness criteria are found in 40 CFR part 51, Appendix V. The EPA has reviewed the $PM_{2.5}$ Prior Commitment Revision and finds that it fulfills the completeness criteria of Appendix V, with the exception of the requirements of paragraphs 2.1(e)–2.1(h), which do not apply to plans submitted for parallel processing.

CAA sections 110(a)(1) and (2) and 110(l) require each state to provide reasonable public notice and opportunity for public hearing prior to the adoption and submission of a SIP submission to the EPA. To meet this requirement, a state's SIP submission must include evidence that the state provided adequate public notice and an opportunity for a public hearing, consistent with the EPA's implementing regulations in 40 CFR 51.102. However, because the $PM_{2.5}$ Prior Commitment Revision was submitted for parallel processing, it is exempt from this requirement at the time of initial submission to the EPA, pursuant to 40 CFR part 51 Appendix V Section 2.3.1. CARB and the District are required to meet these procedural criteria during the parallel processing period, and prior to adopting and submitting the final SIP submission to the EPA. The EPA will evaluate whether the final submission meets these requirements at the time of any final action on the $PM_{2.5}$ Prior Commitment Revision.

III. Review of the $PM_{2.5}$ Prior Commitment Revision

In the $PM_{2.5}$ Prior Commitment Revision, CARB seeks to revise the 2012 $PM_{2.5}$ Plan commitment to achieve 24-hour average, aggregate emission reductions of 1.9 tpd by 2017 by replacing it with a commitment to achieve 24-hour average, aggregate emission reductions of 0.86 tpd by 2017 based on the emissions inventories developed for and used in the 2018 $PM_{2.5}$ Plan.[18] CARB states that the updated inventory reflects real decreases in residential wood burning emissions and relies on its clarifying letter of February 4, 2020, to the EPA that described how CARB updated such emissions estimates as part of its routine emissions inventory improvement process using the latest data.[19]

Section 110(l) of the CAA prohibits the EPA from approving a SIP revision if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (RFP) or any other applicable requirement of the CAA.[20] In this instance, the emissions reductions associated with the 2012 $PM_{2.5}$ Plan aggregate commitment were not required to occur until *after* the Moderate area attainment deadline and were therefore not part of the control strategy at issue in that action.[21] Accordingly, the EPA approved this commitment in order to strengthen the SIP, rather than to meet any CAA requirement. For this reason, the revision of this commitment from 1.9 tpd to 0.86 tpd would not interfere with any applicable requirement of the CAA. We therefore propose to find that approval of the $PM_{2.5}$ Prior Commitment Revision would comply with CAA section 110(l).

IV. Review of Whether the State has Met the Proposed Revised Commitment

As noted above, the more recent inventories that CARB and the District presented in the 2018 $PM_{2.5}$ Plan indicate a 0.86 tpd reduction in winter season direct $PM_{2.5}$ emissions from wood burning devices between 2013 and 2017.[22] In the $PM_{2.5}$ Prior Commitment Revision, CARB explains that this reduction ''does not include any reductions from incentives.'' [23] In other words, the 0.86 tpd reduction resulted directly from the 2014 revision to Rule 4901 and therefore complies with the State's commitment in the 2012 $PM_{2.5}$ Plan, as revised by the $PM_{2.5}$ Prior Commitment Revision, ''to adopt and implement specific rules and measures'' to achieve aggregate winter season direct $PM_{2.5}$ emissions reductions of 0.86 tpd. Accordingly, we propose that the State has met the 0.86 tpd commitment by implementation of the 2014 amendment to Rule 4901 through 2017.

V. Summary of Proposed Actions and Request for Public Comment

For the reasons discussed in this proposed rule, under CAA section

[16] Letter dated April 24, 2020 from Kurt Karperos, Deputy Executive Officer, CARB, to John W. Busterud, Regional Administrator, EPA Region IX.

[17] 40 CFR part 51, appendix V, section 2.3.

[18] $PM_{2.5}$ Prior Commitment Revision, 4–5. Neither the 2012 $PM_{2.5}$ Plan nor the $PM_{2.5}$ Prior Commitment Revision expressly states whether this commitment is based on an annual or winter-season average. Because the emissions inventories on which CARB proposes to base the revised commitment are winter-season averages, we interpret the revised commitment of 0.86 tpd to be a winter-season average. We consider this to be an appropriate basis for the commitment because ambient $PM_{2.5}$ concentrations are typically highest during the winter season (defined as November through April).

[19] $PM_{2.5}$ Prior Commitment Revision, 5 and Appendix A (copy of letter dated February 4, 2020 from Kurt Karperos, Deputy Executive Director, CARB to Elizabeth Adams, Director, Air and Radiation Division, EPA Region IX). See also 85 FR 17832, 17408–17409.

[20] 42 U.S.C. 7410(l).

[21] See 81 FR 59876, 59893, footnote 140.

[22] 2018 $PM_{2.5}$ Plan, App. C, C–257.

[23] $PM_{2.5}$ Prior Commitment Revision, 5.

110(k)(3), the EPA proposes to approve, as a revision to the California SIP, the $PM_{2.5}$ Prior Commitment Revision. We also propose to find that District has complied with its revised aggregate commitment of 0.86 tpd of direct $PM_{2.5}$ emissions reductions by 2017.

The EPA is soliciting public comments on the issues discussed in this document. We will accept comments from the public on this proposal for the next 30 days.

VI. Statutory and Executive Order Reviews

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

For these reasons, this proposed 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 13563 (76 FR 3821, January 21, 2011);
- Is not an Executive Order 13771 (82 FR 9339, February 2, 2017) regulatory action because SIP approvals are exempted under Executive Order 12866;
- 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 an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- 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 Clean Air Act; and
- Does not provide the EPA with the discretionary authority to address disproportionate human health or environmental effects with practical, appropriate, and legally permissible methods under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the proposed 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).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Ammonia, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide, Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: May 1, 2020.

John Busterud,

Regional Administrator, Region IX.

[FR Doc. 2020–09731 Filed 5–11–20; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

[EPA–HQ–SFUND–2003–0010; FRL–10008–93–Region 7]

National Oil and Hazardous Substances Pollution Contingency Plan; National Priorities List: Partial Deletion of the Omaha Lead Superfund Site

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule; notice of intent.

SUMMARY: The Environmental Protection Agency (EPA) Region 7 is issuing a Notice of Intent to Delete 117 residential parcels of the Omaha Lead Superfund site (Site or OLS) located in Omaha, Nebraska, from the National Priorities List (NPL) and requests public comments on this proposed action. The NPL, promulgated pursuant to section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, is an appendix of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The EPA and the State of Nebraska, through the Nebraska Department of Environment and Energy, determined that all appropriate Response Actions under CERCLA were completed at the identified parcels. However, this deletion does not preclude future actions under CERCLA.

This partial deletion pertains to 117 residential parcels. The remaining parcels will remain on the NPL and are not being considered for deletion as part of this action.

DATES: Comments must be received on or before June 11, 2020.

ADDRESSES: Submit your comments, identified by Docket ID no. EPA–HQ–SFUND–2003–0010, by one of the following methods:

- *https://www.regulations.gov.* Follow on-line instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov.* 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 comment. 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, 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.*
- *Email: hagenmaier.elizabeth@epa.gov* or *houston.pamela@epa.gov.*
- *Mail:* Environmental Protection Agency Region 7, 11201 Renner Boulevard, Lenexa, KS 66219 Attention: Elizabeth Hagenmaier, SUPR Division or Pamela Houston, ECO Office.
- *Hand delivery:* Environmental Protection Agency Region 7, 11201 Renner Boulevard, Lenexa, KS 66219. Such deliveries are only accepted between 8:00 a.m. and 4:00 p.m., Monday–Friday excluding Federal holidays and special arrangements should be made for deliveries of boxed information.

• For additional submission methods, please contact the persons identified in the **FOR FURTHER INFORMATION CONTACT** section.

Instructions: Direct your comments to Docket ID no. EPA–HQ–SFUND–2003–0010. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *http://www.regulations.gov,* including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through *http://www.regulations.gov* or email. The *http://www.regulations.gov* website is an ''anonymous access'' system, which means the EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to the EPA without going through *http://www.regulations.gov,* your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the internet. If you submit an electronic comment, the EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If the EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, the EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: The docket contains the information that was the basis for the partial deletion, specifically the documentation regarding the results of soil cleanup activities. Information regarding the optional voluntary cleanup activities such as the lead-based paint stabilization and interior dust sampling is not provided in the docket but is available from the EPA on a case-by-case basis. Certain other material, such as copyrighted material, will be publicly available only in the hard copy.

All documents in the docket are listed in the *http://www.regulations.gov* index. 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, will be publicly available only in the hard copy. Publicly available docket materials are available either electronically in *http://www.regulations.gov* or in hard copy at: EPA Region 7 Records Center at 11201 Renner Boulevard, Lenexa, Kansas 66219, between 8:00 a.m. and 4:00 p.m. Monday through Friday, excluding Federal holidays and facility closures due to COVID–19. We recommend that you contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section before visiting the Region 7 office.

The Omaha public libraries also have computer resources available to assist the public. The W. Dale Clark Library, located at 215 S. 15th Street, Omaha, NE 68102 is centrally located within the site boundary.

FOR FURTHER INFORMATION CONTACT: Elizabeth Hagenmaier, Remedial Project Manager, U.S. Environmental Protection Agency Region 7, SUPR/LMSE, 11201 Renner Boulevard, Lenexa, KS 66219, telephone (913) 551–7939, email: *hagenmaier.elizabeth@epa.gov.*

SUPPLEMENTARY INFORMATION: Throughout this document ''we,'' ''us,'' or ''our'' refer to the EPA. This section provides additional information by addressing the following:

I. Introduction
II. NPL Deletion Criteria
III. Deletion Procedures
IV. Background and Basis for Intended Partial Site Deletion

I. Introduction

The EPA Region 7 is proposing to delete 117 residential parcels of the Omaha Lead Superfund site (Site or OLS), from the National Priorities List (NPL) and is requesting public comment on this proposed action. The table of 117 Properties Proposed for the 2020 Partial Deletion of Properties from the Omaha Lead Superfund site, (EPA–HQ–SFUND–2003–0010–1985) identifies specific properties included for this proposed partial deletion. The location of the 117 properties are shown on Figure 1 ''Map for the 2020 Partial Deletion Omaha Lead Site'' (EPA–HQ–SFUND–2003–0010–1983). The NPL constitutes appendix B of 40 CFR part 300, which is the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), which the EPA promulgated pursuant to section 105 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended. The EPA maintains the NPL as those sites that appear to present a significant risk to public health, welfare, or the environment. Sites on the NPL may be the subject of remedial actions financed by the Hazardous Substance Superfund (Fund). This partial deletion of the Omaha Lead Superfund site is proposed in accordance with 40 CFR 300.425(e) and is consistent with the Notice of Policy Change: Partial Deletion of Sites Listed on the National Priorities List 60 FR 55466 (November 1, 1995). As described in 300.425(e)(3) of the NCP, a portion of a site deleted from the NPL remains eligible for Fund-financed remedial action if future conditions warrant such actions.

The EPA will accept comments on the proposal to partially delete this site for thirty (30) days after publication of this document in the **Federal Register**.

Section II of this document explains the criteria for deleting sites from the NPL. Section III discusses procedures that the EPA is using for this action. Section IV discusses the 117 residential parcels of the Omaha Lead Superfund site and demonstrates how they meet the deletion criteria.

II. NPL Deletion Criteria

The NCP establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate. In making such a determination pursuant to 40 CFR 300.425(e), the EPA will consider, in consultation with the State, whether any of the following criteria have been met:

i. Responsible parties or other persons have implemented all appropriate response actions required;

ii. All appropriate Fund-financed response under CERCLA has been implemented, and no further response action by responsible parties is appropriate; or

iii. The remedial investigation has shown that the release poses no significant threat to public health or the environment and, therefore, the taking of remedial measures is not appropriate.

Pursuant to CERCLA section 121(c) and the NCP, the EPA conducts five-year reviews to ensure the continued protectiveness of remedial actions where hazardous substances, pollutants, or contaminants remain at a site above levels that allow for unlimited use and unrestricted exposure. The EPA conducts such five-year reviews even if a site is deleted from the NPL. The EPA may initiate further action to ensure continued protectiveness at a deleted site if new information becomes available that indicates it is appropriate. Whenever there is a significant release from a site deleted from the NPL, the deleted site may be restored to the NPL without application of the hazard ranking system.

III. Deletion Procedures

The following procedures apply to deletion of the 117 residential parcels of the Site:

(1) The EPA consulted with the State before developing this Notice of Intent for Partial Deletion.

(2) The EPA has provided the State 30 working days for review of this document prior to publication of it today.

(3) In accordance with the criteria discussed above, the EPA has determined that no further response is appropriate.

(4) The State of Nebraska, through the Nebraska Department of Environment and Energy, has concurred with the deletion of the 117 residential parcels of the Omaha Lead Superfund site, from the NPL.

(5) Concurrently, with the publication of this Notice of Intent for Partial Deletion in the **Federal Register**, a notice is being published in a major local newspaper, the Omaha World Herald. The newspaper announces the 30-day public comment period concerning the Notice of Intent for Partial Deletion of the Site from the NPL.

(6) The EPA placed copies of documents supporting the proposed partial deletion in the deletion docket and made these items available for public inspection and copying at the Site information repositories identified above.

If comments are received within the 30-day comment period on this document, the EPA will evaluate and respond appropriately to the comments before making a final decision to delete the 117 residential parcels. If necessary, the EPA will prepare a Responsiveness Summary to address any significant public comments received. After the public comment period, if the EPA determines it is still appropriate to delete the 117 residential parcels of the Omaha Lead Superfund site, the Regional Administrator will publish a final Notice of Partial Deletion in the **Federal Register**. Public notices, public submissions and copies of the Responsiveness Summary, if prepared, will be made available to interested parties and included in the site information repositories listed above.

Deletion of a portion of a site from the NPL does not itself create, alter, or revoke any individual's rights or obligations. Deletion of a portion of a site from the NPL does not in any way alter EPA's right to take enforcement actions, as appropriate. The NPL is designed primarily for informational purposes and to assist EPA management. Section 300.425(e)(3) of the NCP states that the deletion of a site from the NPL does not preclude eligibility for future response actions, should future conditions warrant such actions.

IV. Background and Basis for Intended Partial Site Deletion

The following information provides EPA's rationale for deleting the 117 residential parcels of the Omaha Lead Superfund site from the NPL, as previously identified.

Site Background and History

The Omaha Lead Superfund site (Site or OLS [CERCLIS ID # NESFN0703481]) includes surface soils present at residential properties, child-care centers, and other residential-type properties in the city of Omaha, Douglas County, Nebraska. The properties were contaminated as a result of deposition of aerial emissions from historic lead smelting and refining operations. The OLS encompasses the eastern portion of the greater metropolitan area in Omaha, Nebraska. The site extends from the Douglas-Sarpy County line on the south, north to Read Street and from the Missouri River on the east to 56th Street on the west. The Site is centered around downtown Omaha, Nebraska, where two former lead-processing facilities operated. American Smelting and Refining Company, Inc. (ASARCO) operated a lead refinery at 500 Douglas Street in Omaha, Nebraska, for over 120 years. Aaron Ferer & Sons Company (Aaron Ferer), and later Gould Electronics, Inc., (Gould) operated a lead battery recycling plant located at 555 Farnam Street. Both ASARCO and Aaron Ferer/Gould facilities released lead-containing particulates into the atmosphere from their smokestacks. The lead particles were subsequently deposited on surrounding residential properties.

Beginning in 1984, the Douglas County Health Department (DCHD) monitored ambient air quality around the ASARCO facility. This air monitoring routinely measured ambient air lead concentrations in excess of the ambient air standard. Between 1972 and 1998 the DCHD measured the blood lead level in children within the county. The results of the measurements indicated a high incidence of elevated blood lead level in children. Blood lead screening of children living in zip codes located east of 45th Street consistently exceeded 10 micrograms per deciliter (μg/dl) more frequently than children living elsewhere in the county.

In 1998, the Omaha City Council requested assistance from the EPA to address the high incidence of children found with elevated blood lead levels by the DCHD. In 1999, the EPA initiated an investigation into the lead contamination under the authority of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). On February 26, 2002, the OLS was proposed for the NPL (67 FR 8836), and on April 30, 2003, the OLS was listed on the NPL (68 FR 23077).

The OLS includes those residential properties where the EPA determined through soil sampling that soil lead levels represent an unacceptable risk to human health. Residential properties where soil sampling indicates that lead concentrations in the soil are below a level that represent an unacceptable risk are not included in the Site. Residential properties include those with high accessibility to sensitive populations (children seven years of age and younger [0 to 84 months] and pregnant or nursing women). The properties include single and multi-family dwellings, apartment complexes, child daycare facilities, vacant lots in residential areas, schools, churches, community centers, parks, greenways, and any other areas where children may be exposed to site-related contaminated media. Commercial and industrial properties are excluded from the definition of the Site.

The residential properties proposed for deletion from the NPL site were cleaned up under both CERCLA removal and remedial authority. Regardless of the authority used for the remediation of yards, the cleanup levels for soils for all the properties proposed for deletion were the same.

Response Actions

The initial EPA response was conducted under CERCLA removal authority. Due to the size of the site and the very large number of individual properties, it was necessary to prioritize sites for cleanup. The prioritization was based on factors such as the elevated blood level of children at each property and the lead concentration in the soil at each property. The result was a series of action levels that reflected the priority of categories of sites. Consequently, the action level for the site soils changed over time from 2500 mg/kg to 400 mg/kg, as the highest priority sites were cleaned up first. The cleanup level was established using the Integrated Exposure Uptake Biokinetic (IEUBK) model to determine the concentration to which the lead is cleaned up at each property within the site. The cleanup level for the OLS is 400 mg/kg of lead in the soil. The cleanup level of 400 mg/

kg was selected to allow for unlimited use and unrestricted exposure. The cleanup level has not changed, and all properties, regardless of the action level, were cleaned up to 400 mg/kg.

Removal Activities

Beginning in March 1999, the EPA began collecting soil samples from properties that provided licensed child daycare services. The initial removal action dated August 2, 1999, consisted of excavation and replacement of contaminated soil where the lead concentration exceeded the action levels identified in the Action Memorandum. Response actions were implemented at properties that met either of the following criteria:

- A child seven years of age or younger (0 to 84 months) residing at the property was identified with an elevated blood level (EBL) exceeding 15 µg/dl (this EBL was reduced to 10 µg/dl in August 2001) and a soil sample collected from a non-foundation quadrant exhibited lead concentrations greater than 400 mg/kg, or
- A property was used as a child-care facility and a soil sample collected from a non-foundation quadrant exhibited a lead concentration greater than 400 mg/kg.

On August 22, 2002, the EPA initiated a second removal action. This second removal action included all other residential type properties where the maximum non-foundation soil lead concentration exceeded an action level of 2,500 mg/kg. The 2002 Action Memorandum explicitly identifies the possibility of lead-based paint as a potential contributor to lead contamination of soils within thirty inches of the foundation of a painted structure. Due to the potential contribution of deteriorating lead-based paint near the foundations of structures, a lead concentration greater than 400 mg/kg in the soil in the drip zone (areas near structure foundations) was not, in itself, sufficient to trigger soil removal. However, if a soil sample from any mid-yard quadrant exceeded the action level, soil was removed from all areas of the property exceeding the 400 mg/kg cleanup level, including the drip zone. In November 2003, the EPA amended the second removal action to reduce the action level to 1,200 mg/kg concentration of lead in soil. In March 2004, the EPA amended the second removal action to combine the two removal actions. In March 2005, the EPA amended the removal action to reduce the action level from 1200 mg/kg to 800 mg/kg.

At properties determined to be eligible for response under either of the Action Memoranda, soil with lead concentrations greater than the cleanup level was excavated and replaced with clean soil and the excavated areas were revegetated.

EPA signed an Interim Recored of Decision on December 15, 2004. Beginning with the construction season of 2005, the scope of the removal action was expanded to address the requirements of the 2004 Interim ROD to include: (1) Stabilization of deteriorating exterior lead-based paint at properties where the continued effectiveness of the soil remediation was threatened; (2) response to interior dust at properties where interior dust lead levels exceeded applicable criteria; (3) public health education; and (4) participation in a comprehensive remedy with other agencies and organizations that addresses all identified lead hazards in the Omaha community.

Remedial Investigation/Feasibility Study (RI/FS)—Human Health Risk Assessment

As part of the RI/FS, the EPA developed a Human Health Risk Assessment (HHRA) for the Site using site-specific information collected during the OLS Remedial Investigation. Lead was identified as the primary contaminant of concern. The HHRA also identified arsenic as a potential contaminant of concern, but arsenic was eliminated based on its relatively low overall risk to residents and lack of connection to the release from the industrial sources being addressed by this Superfund action.

The risk assessment for lead focused on young children under the age of seven (0 to 84 months) who are site residents. Young children are most susceptible to lead exposure because they have higher contact rates with soil or dust, absorb lead more readily than adults, and are more sensitive to the adverse effects of lead than are older children and adults. The effect of greatest concern in children is impairment of the nervous system, including learning deficits, reduced intelligence, and adverse effects on behavior. The IEUBK model for lead in children was used to evaluate the risks posed to young children (0 to 84 months) resulting from the lead contamination at the site. Because lead does not have a nationally-approved reference dose (RfD), cancer slope factor, or other accepted toxicological factor which can be used to assess risk, standard risk assessment methods cannot be used to evaluate the health risks associated with lead contamination. The modeling results determined that there was an unacceptable risk to young children from exposure to soils above 400 mg/kg.

In October 2008, the EPA released a draft Final Remedial Investigation. Based on the 2008 data set, EPA established the boundary of the Final Focus Area for the Site. The Final Focus Area is generally bounded by Read Street to the north, 56th Street to the west, Harrison Street (Sarpy County line) to the south, and the Missouri River to the east, and encompasses 17,280 acres (27.0 square miles). By the time the Final Remedial Investigation was completed, the EPA had collected soil samples from 37,076 residential properties, including 34,565 properties within the Final Focus Area's boundary. In total, 34.2 percent of properties sampled through completion of the 2008 RI had at least one mid-yard sample with a soil lead level exceeding 400 mg/kg. In addition to soil sampling, the EPA collected dust samples from the interior of 159 residences to support the OLS Human Health Risk Assessment.

Record of Decision

The EPA completed the Final Record of Decision (ROD) for the OLS in May 2009. The Remedial Action Objective is to reduce the risk of exposure of young children to lead such that an individual child, or group of similarly exposed children, have no greater than a 5 percent chance of having a blood-lead concentration exceeding 10 µg/dl. The selected remedy includes the following components:

- Excavation and Replacement of Soils Exceeding 400 mg/kg Lead
- Stabilization of Deteriorating Exterior Lead-Based Paint
- Response to Lead-Contaminated Interior Dust
- Health Education
- Operation of a Local Lead Hazard Registry as a type of Institutional Control

Each of these components is described below.

Remedial Actions

Excavation and Replacement of Soils Exceeding 400 mg/kg Lead

Excavation of soils was accomplished using lightweight excavation equipment and hand tools in the portions of the yard where the concentration of lead in the surface soil exceeded 400 mg/kg. Excavation continued in all quadrants, play zones, and drip zone areas exceeding 400 mg/kg lead until the residual lead concentration measured at the exposed surface of the excavation was less than 400 mg/kg in the upper foot, or less than 1,200 mg/kg at depths

greater than one foot. Typically, soil excavation depths were between six and ten inches in depth. Soils in garden areas were excavated until reaching a residual concentration of less than 400 mg/kg in the upper two feet measured from the original surface, or less than 1,200 mg/kg at depths greater than two feet.

After confirmation sampling verified that cleanup goals were achieved, the excavated areas were backfilled with clean soil to original grade and sod was placed over the remediated areas.

The EPA's remediation contractors stockpiled contaminated soil in staging areas, collected samples, and subsequently transported soil to an off-site subtitle D solid waste disposal landfill for use as daily cover and/or disposal.

Stabilization of Deteriorating Exterior Lead-Based Paint

The EPA used the lead-based paint assessment protocol, presented in the Final Lead-Based Paint Recontamination Study Report prepared for the OLS, to determine eligibility for exterior lead-based paint stabilization at those properties where soil lead concentrations exceeded 400 mg/kg. At those properties where the exterior lead-based paint assessment identified a threat from deteriorating paint to the continued protectiveness of the soil remedy, the owner of the property was offered stabilization of painted surfaces on structures located on the property. Exterior lead-based paint stabilization is not mandatory and was provided to those qualifying property owners who chose to have their exterior paint stabilized. Removal of loose and flaking lead-based paint was performed using lead-safe practices as described in EPA's Renovate, Repair and Painting Rule. The practices include wet scraping, and collection of paint chips using plastic sheeting. Scraped areas were primed and all previously painted surfaces had two coats of paint applied.

Response to Lead-Contaminated Interior Dust

As part of the final remedy, residents at eligible properties are provided the opportunity to have interior dust sampled. The interior dust response is not mandatory, and the resident may choose to decline. If the property owner agrees, the EPA collects samples of dust from interior surfaces. The analytical data is provided to the resident/tenant in a letter and the letter informs them whether any HUD criteria are exceeded. The Douglas County Health Department conducts follow up activities at any residence where the concentration of lead in the interior dust levels exceed the HUD criteria. For those residences that qualify and where the resident agrees, the residents are provided with a high-efficiency household vacuum cleaner, training on the maintenance and the importance of proper usage of the vacuum, and education on mitigation of household lead hazards. The Douglas County Health Department also provides training and education regarding the need to mitigate interior dust.

Exterior lead-based paint stabilization and interior dust response were conducted retroactively at properties where soil cleanups were performed under CERCLA removal authority, as well as to properties addressed under CERCLA remedial authority.

Health Education

There are a number of identified lead hazards within the OLS, not all of which are connected to the contaminant source of the OLS. To better address all potential lead sources within the OLS, a health education program was developed and continues to be implemented to increase public awareness and mitigate exposure. An active educational program continues in cooperation with agencies and organizations that include Agency for Toxic Substances and Disease Registry (ATSDR), the Nebraska Department of Health and Human Services (NDHHS), DCHD, local non-governmental organizations, and other interested parties. The following, although not an exhaustive list, indicate the types of educational activities provided at the Site:

- Support for in-home assessments for children identified with elevated blood lead levels.
- Development and implementation of lead poisoning prevention curriculum in schools.
- Support for efforts to increase community-wide blood lead monitoring.
- Physicians' education for diagnosis, treatment, and surveillance of lead exposure.
- Operation of Public Information Centers to distribute information and respond to questions about the EPA response activities and lead hazards in the community.
- Use of mass media (television, radio, internet, print media, etc.) to distribute health education messages.
- Development and distribution of informational tools such as fact sheets, brochures, refrigerator magnets, etc., to inform the public about lead hazards and measures that can be taken to avoid or eliminate exposure.

Institutional Controls

The Omaha Lead Registry, (available at *www.omahalead.org*) is a GIS based database that provides the public with on-line access to the status of the EPA investigation and response actions. The EPA notifies residents and property owners about the information that is available through the lead hazard registry as part of the transmittal sent at the completion of soil remediation at each individual property.

Community Involvement

The EPA worked extensively with the Omaha community through a variety of communication vehicles including, but not limited to: local speaking engagements, participation in citizens' groups and city council meetings, local public access television, public service announcements on local cable television, coverage on radio, television, in local and national newspapers, mass mailings of informational materials, public outreach by telephone, conducting public meetings, and through the EPA website.

The EPA has been performing outreach to Omaha citizens, elected officials, school officials, health officials, the media, nonprofit groups, and others since becoming involved in the project in an effort to convey information about the hazards of lead poisoning, particularly the ways that lead affects the health of children. The EPA participated in numerous formal and informal meetings to explain EPA's role and commitment in Omaha, convey information about the Superfund process, and provide general information about the site and lead contamination. The EPA responds to inquiries on a daily basis regarding the site and individual property owner's sampling results.

In January 2004, a Community Advisory Group (CAG) was formed for the OLS site. A CAG is a committee, task force, or board made up of residents affected by a Superfund site. The CAG provided a public forum where representatives with diverse community interests could present and discuss their needs and concerns related to the site and the cleanup process. The CAG was discontinued after the last meeting was held in October 2011. A new group, Child Lead Poisoning Prevention Group, formed. The first meeting of the Child Lead Poisoning Group was held at City Hall in May 2012. The Group is no longer active.

Five-Year Review

The EPA completed the second Five-Year Review for the site in August 2019.

Five-Year Reviews for the site are statutory. The triggering action for the Five-Year Review is the completion of the first Five-Year Review for the site in September 2014.

The protectiveness of the remedy was deferred in the Five-Year Review because the remedy had not been completed at all of the properties within the site boundary. However, cleanup activities at the 117 residential parcels included in this partial deletion action are complete and protective of human health. There are no issues or recommendations in the Five-Year Review related to these 117 residential parcels proposed for deletion.

The next Five-Year Review will be completed in August 2024.

Summary of EPA Work Completed

Soil Testing and Remediation

The EPA Region 7 completed the EPA lead portion of the remedial action on December 29, 2015. The city of Omaha and the Douglas County Health Department will be performing the remaining field work. As of December 29, 2015, the EPA collected soil samples from 42,047 properties. There are 489 remaining properties to be sampled. The EPA has obtained access to collect samples from 163 of the 489 properties.

Based on the soil sampling results, 14,019 properties were eligible for soil remediation. The EPA remediated lead contaminated soil at 13,090 properties (93 percent) of the properties that were eligible for remediation. There are approximately 929 remaining properties that are eligible for soil remediation. The EPA obtained access to remediate fifty-one of the remaining properties.

Lead-based Paint Testing and Stabilization

The EPA tested 12,057 properties for the presence of lead-based paint (LBP). Six thousand seven hundred and eighty-two (6,782) properties qualify for LBP stabilization. The EPA completed LBP stabilization on 6,249, (92 percent) of the eligible properties.

Dust Sampling

The EPA collected dust samples from 3,933 properties consisting of 4,477 residences for lead contaminated dust. These numbers reflect the fact that some of the properties are multi-residence properties.

Continuing Remedial Action

The EPA completed Cooperative Agreements with the city of Omaha and the Douglas County Health Department that provide funds to allow these local government agencies to continue efforts to obtain access to the remaining properties and conduct sampling and remediation activities at those properties where they obtain access.

Determination That the Criteria for Deletion Has Been Achieved

In accordance with 40 CFR 300.425(e), Region 7 of the EPA finds that the 117 residential parcels of the Omaha Lead Superfund site (the subject of this deletion action) meet the substantive criteria for deletion from the NPL. The EPA has consulted with and has the concurrence of the state of Nebraska. All responsible parties or other persons have implemented all appropriate response actions required. All appropriate Fund-financed response under CERCLA was implemented, and no further response action by responsible parties is appropriate.

The implemented remedy at the 117 residential parcels has achieved the degree of cleanup specified in the ROD for all pathways of exposure. All selected remedial action objectives and associated cleanup levels are consistent with agency policy and guidance. No further Superfund response is needed to protect human health and the environment.

List of Subjects in 40 CFR Part 300

Environmental Protection, Air pollution control, Chemicals, Hazardous substances, Hazardous waste, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Superfund, Water pollution control, Water supply.

Authority: 33 U.S.C. 1321(c)(2); 42 U.S.C. 9601–9657; E.O. 13626, 77 FR 56749, 3 CFR, 2013 Comp., p. 306; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; E.O. 12580, 52 FR 2923, 3 CFR, 1987 Comp., p. 193.

Dated: April 29, 2020.

James Gulliford,

Regional Administrator, Region 7.

[FR Doc. 2020–09681 Filed 5–11–20; 8:45 am]

BILLING CODE 6560–50–P

Notices

Federal Register
Vol. 85, No. 92
Tuesday, May 12, 2020

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.

DEPARTMENT OF AGRICULTURE

Forest Service

North Central Idaho Resource Advisory Committee

AGENCY: Forest Service, USDA.

ACTION: Notice of Virtual meeting.

SUMMARY: The North Central Idaho Resource Advisory Committee (RAC) will hold a virtual meeting. The committee is authorized under the Secure Rural Schools and Community Self-Determination Act (the Act) and operates in compliance with the Federal Advisory Committee Act. The purpose of the committee is to improve collaborative relationships and to provide advice and recommendations to the Forest Service concerning projects and funding consistent with Title II of the Act. RAC information can be found at the following website: *https://www.fs.usda.gov/main/nezperceclearwater/workingtogether/advisorycommittees.*

DATES: The meeting will begin at 9:00 a.m. each day on:

- Tuesday, June 16, 2020, and
- Wednesday, June 17, 2020.

All RAC meetings are subject to cancellation. For status of the meeting prior to attendance, please contact the person listed under **FOR FURTHER INFORMATION CONTACT.**

ADDRESSES: The meeting will be held with virtual attendance only. For virtual meeting information, please contact the person listed under **FOR FURTHER INFORMATION CONTACT.**

Written comments may be submitted as described under *Supplementary Information.* All comments, including names and addresses when provided, are placed in the record and are available for public inspection and copying. The public may inspect comments received at the Nez Perce-Clearwater National Forest, Grangeville Office. Please call ahead at 208–983–7004 to facilitate entry into the building.

FOR FURTHER INFORMATION CONTACT: Lisa Canaday, RAC Coordinator, by phone at 208–983–8917 or via email at *lisa.canaday@usda.gov.*

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8:00 a.m. and 8:00 p.m., Eastern Standard Time, Monday through Friday.

SUPPLEMENTARY INFORMATION: The purpose of the meeting is to:

1. Elect a RAC chairperson,
2. Present project proposals, and
3. Discuss, recommend, and approve new Title II projects.

The meeting is open to the public. The agenda will include time for people to make oral statements of three minutes or less. Individuals wishing to make an oral statement should request in writing by Friday, June 12, 2020, to be scheduled on the agenda. Anyone who would like to bring related matters to the attention of the committee may file written statements with the committee staff before or after the meeting. Written comments and requests for time for oral comments must be sent to Lisa Canaday, RAC Coordinator, 104 Airport Road, Grangeville, Idaho 83530; by email to *lisa.canaday@usda.gov,* or via facsimile to 208–983–4098.

Meeting Accommodations: If you are a person requiring reasonable accommodation, please make requests in advance for sign language interpreting, assistive listening devices, or other reasonable accommodation. For access to the proceedings, please contact the person listed in the section titled **FOR FURTHER INFORMATION CONTACT.** All reasonable accommodation requests are managed on a case by case basis.

Dated: May 6, 2020.

Cikena Reid,

USDA Committee Management Officer.

[FR Doc. 2020–10043 Filed 5–11–20; 8:45 am]

BILLING CODE 3411–15–P

DEPARTMENT OF AGRICULTURE

Forest Service

Final Record of Decision for the Rio Grande National Forest Land Management Plan

AGENCY: Forest Service, USDA.

ACTION: Notice of plan approval for the Rio Grande National Forest.

SUMMARY: Dan Dallas, the Forest Supervisor for the Rio Grande National Forest, Rocky Mountain Region, signed the Record of Decision (ROD) for the Rio Grande National Forest Land Management Plan (Forest Plan). The final ROD documents the rationale for approving the Forest Plan and is consistent with the reviewing officer's responses to objections and instructions.

DATES: The Forest Plan for the Rio Grande National Forest will become effective June 11, 2020. To view the final ROD, final environmental impact statement (FEIS), the Forest Plan, and other related documents, please visit the Rio Grande National Forest Plan Revision website at: *https://www.fs.usda.gov/detail/riogrande/landmanagement/projects/?cid=stelprd3819044.*

FOR FURTHER INFORMATION CONTACT: Information about the Forest Plan for the Rio Grande National Forest can be obtained from Judi Pérez, weekdays, 8:00 a.m. to 4:00 p.m. Mountain Time at the Rio Grande National Forest Supervisor's Office at 719–852–5941 or *judi.perez@usda.gov.* Written requests for information may be sent to Rio Grande National Forest, Attn: Plan Revision, 1803 W. Highway 160, Monte Vista, Colorado 81144.

Individuals who use telecommunication devices for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 between 8 a.m. and 8 p.m., Eastern Time, Monday through Friday.

SUPPLEMENTARY INFORMATION: The Forest Plan describes the Rio Grande National Forest's distinctive roles and contributions within the broader landscape and details forestwide and management area desired conditions, objectives, standards, and guidelines. The Forest Plan identifies suitable uses of National Forest System lands and provides estimates of the planned timber sale quantity. The Forest Plan identifies priority watersheds for restoration and includes recommended wilderness areas and eligible wild and scenic rivers. The Forest Plan also provides for efficient and effective management of the Rio Grande National Forest with desired conditions for coordination, partnerships, and shared stewardship with State, local, and Tribal

governments, other federal agencies, adjacent landowners, and stakeholders.

The Rio Grande National Forest initiated plan revision in December 2014 with stakeholder and topic-based meetings. The Forest Service invited States, local and Tribal governments, and other federal agencies from around the region to participate in the process to revise the Forest Plan. The Forest Service received around 465 letters of comment on the Forest Plan. Public meetings were held throughout the process in a variety of locations and venues.

The development of the Forest Plan was shaped by the best available science, current laws, and public input. The 60-day timeframe for the opportunity to object ended on October 1, 2019. The Forest Service received 14 eligible objections. The reviewing officer issued his written responses to the objection issues. The Deputy Regional Forester, Reviewing Official, provided the Forest Supervisor minor clarification instructions for most of the objection issues. The final ROD documents the rationale for approving the Forest Plan and is consistent with the reviewing officer's responses to objections and instructions.

Responsible Official

The responsible official for approving the Forest Plan is Dan Dallas, Forest Supervisor, Rio Grande National Forest, 1803 W. Highway 160, Monte Vista, CO 81144.

Allen Rowley,

Associate Deputy Chief, National Forest System.

[FR Doc. 2020–10085 Filed 5–11–20; 8:45 am]

BILLING CODE 3411–15–P

COMMISSION ON CIVIL RIGHTS

Notice of Public Meeting of the Louisiana Advisory Committee to Discuss the Selection of a Civil Rights Topic in Louisiana for the Committee's Next Project

AGENCY: U.S. Commission on Civil Rights.

ACTION: Announcement of meeting.

SUMMARY: Notice is hereby given, pursuant to the provisions of the rules and regulations of the U.S. Commission on Civil Rights (Commission) and the Federal Advisory Committee Act that the Louisiana Advisory Committee (Committee) will hold a meeting on Friday, May 29, 2020 at 12:00 p.m. (Central) for discussions on civil rights topics in Louisiana.

DATES: The meeting will be held on Friday, May 29, 2020 at 12:00 p.m. (Central).

Public Call Information: Dial: 888–204–4368, Conference ID: 6869207.

FOR FURTHER INFORMATION CONTACT: David Barreras, DFO, at *dbarreras@usccr.gov* or 312–353–8311.

SUPPLEMENTARY INFORMATION: Members of the public can listen to the discussion. This meeting is available to the public through the following toll-free call-in number: 888–204–4368, conference ID: 6869207. Any interested member of the public may call this number and listen to the meeting. An open comment period will be provided to allow members of the public to make a statement as time allows. The conference call operator will ask callers to identify themselves, the organization they are affiliated with (if any), and an email address prior to placing callers into the conference room. Callers can expect to incur regular charges for calls they initiate over wireless lines, according to their wireless plan. The Commission will not refund any incurred charges. Callers will incur no charge for calls they initiate over land-line connections to the toll-free telephone number. Persons with hearing impairments may also follow the proceedings by first calling the Federal Relay Service at 1–800–977–8339 and providing the Service with the conference call number and conference ID number.

Members of the public are also entitled to submit written comments; the comments must be received in the regional office within 30 days following the meeting. Written comments may be mailed to the Midwestern Regional Office, U.S. Commission on Civil Rights, 230 S Dearborn St., Suite 2120, Chicago, IL 60604. They may also be faxed to the Commission at (312) 353–8324 or emailed to David Barreras at *dbarreras@usccr.gov.* Persons who desire additional information may contact the Midwestern Regional Office at (312) 353–8311.

Records generated from this meeting may be inspected and reproduced at the Midwestern Regional Office, as they become available, both before and after the meeting. Records of the meeting will be available via *www.facadatabase.gov* under the Commission on Civil Rights, Louisiana Advisory Committee link (*http://www.facadatabase.gov/committee/committee.aspx?cid=251&aid=17*). Persons interested in the work of this Committee are directed to the Commission's website, *http://www.usccr.gov,* or may contact the Midwestern Regional Office at the above email or street address.

Agenda

Welcome and Roll Call
Discussion of civil rights topics in Louisiana
Next Steps
Public Comment
Adjournment

Dated: May 6, 2020.

David Mussatt,

Supervisory Chief, Regional Programs Unit.

[FR Doc. 2020–10074 Filed 5–11–20; 8:45 am]

BILLING CODE P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–920]

Lightweight Thermal Paper From the People's Republic of China: Rescission of Antidumping Duty Administrative Review; 2018–2019

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

SUMMARY: The Department of Commerce (Commerce) is rescinding the administrative review of the antidumping duty (AD) order on lightweight thermal paper (LWTP) from the People's Republic of China (China) for the period of review (POR) November 1, 2018 through October 31, 2019, based on the timely withdrawal of the request for review.

DATES: Applicable May 12, 2020.

FOR FURTHER INFORMATION CONTACT: Kyle Clahane, 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) 482–5449.

SUPPLEMENTARY INFORMATION:

Background

On November 1, 2019, Commerce published in the **Federal Register** a notice of opportunity to request an administrative review of the AD order on LWTP from China.[1] Commerce received a timely-filed request from Appvion, Inc. (Appvion), a domestic interested party and the petitioner in the underlying investigation, for an administrative review of exports of subject merchandise to the United States during the POR with respect to 16

[1] *See Antidumping or Countervailing Duty Order, Finding, or Suspended Investigation; Opportunity To Request Administrative Review,* 84 FR 58690 (November 1, 2019).

companies, in accordance with section 751(a) of the Tariff Act of 1930, as amended (the Act), and 19 CFR 351.213(b).[2] On January 17, 2020, pursuant to this request, and in accordance with 19 CFR 351.221(c)(1)(i), Commerce published a notice initiating an administrative review of the AD order on LWTP from China.[3] On March 26, 2020, Appvion withdrew its request for an administrative review with respect to all companies for which it requested a review.[4]

On April 24, 2020, Commerce tolled all deadlines in administrative reviews by 50 days, thereby extending the deadline for these results until September 21, 2020.[5]

Rescission of Review

Pursuant to 19 CFR 351.213(d)(1), Commerce will rescind an administrative review, in whole or in part, if the party or parties that requested a review withdraws the request within 90 days of the publication date of the notice of initiation of the requested review. Appvion timely submitted a request to withdraw its request for administrative review for all companies for which an administrative review was initiated. No other party requested an administrative review of the order. Therefore, in accordance 19 CFR 351.213(d)(1), we are rescinding this review, in its entirety.

Assessment

Commerce will instruct U.S. Customs and Border Protection (CBP) to assess antidumping duties on all appropriate entries of LWTP from China. Antidumping duties shall be assessed at rates equal to the cash deposit of estimated antidumping duties required at the time of entry, or withdrawal from warehouse, for consumption in accordance with 19 CFR 351.212(c)(1)(i). Commerce intends to issue appropriate assessment instructions to CBP 15 days after the date of publication of this notice in the **Federal Register**.

Notification to Importers

This notice serves as the only reminder to importers whose entries will be liquidated as a result of this rescission notice, 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 review period. Failure to comply with this requirement could result in the presumption that reimbursement of the antidumping and/or countervailing duties occurred and the subsequent assessment of double antidumping duties.

Notification Regarding Administrative Protective Order

This notice also serves as a reminder to all 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. Timely written notification of the return/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 notice is issued and published in accordance with sections 751(a) and 777(i)(1) of the Act, and 19 CFR 351.213(d)(4).

Dated: May 6, 2020.

James Maeder,

Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.

[FR Doc. 2020–10072 Filed 5–11–20; 8:45 am]

BILLING CODE 3510–DS–P

[2] *See* Appvion's Letter, ''Lightweight Thermal Paper From The People's Republic Of China: Request For Administrative Review,'' dated December 2, 2019.

[3] *See Initiation of Antidumping and Countervailing Duty Administrative Reviews,* 85 FR 3014 (January 17, 2020).

[4] *See* Appvion's Letter, ''Lightweight Thermal Paper from The People's Republic of China: Withdrawal Of Request For Administrative Review,'' dated March 26, 2020.

[5] *See* Memorandum, ''Tolling of Deadlines for Antidumping and Countervailing Duty Administrative Reviews in Response to Operational Adjustments Due to COVID–19,'' dated April 24, 2020.

DEPARTMENT OF COMMERCE

International Trade Administration

[C–357–821]

Biodiesel From Argentina: Final Results of Countervailing Duty Changed Circumstances Review

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

SUMMARY: On July 9, 2019, the Department of Commerce (Commerce) published the preliminary results of the changed circumstances review (CCR) of the countervailing duty (CVD) order on biodiesel from Argentina. For these final results, Commerce finds that sufficient changed circumstances do not exist warranting a recalculation of the CVD deposit rates in the order.

DATES: Applicable May 12, 2020.

FOR FURTHER INFORMATION CONTACT: Mark Hoadley, AD/CVD Operations, Office VII, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–3148.

SUPPLEMENTARY INFORMATION:

Background

On January 4, 2019, Commerce published the CVD order on biodiesel from Argentina.[1] On November 13, 2018, in response to a request submitted by the Government of Argentina (GOA), joined by Vicentin S.A.I.C. (Vicentin) and LDC Argentina (LDC), Commerce initiated a CCR for both the CVD and antidumping duty (AD) orders.[2] Commerce exercised its discretion to toll all deadlines affected by the partial federal government closure from December 22, 2018 through the resumption of operations on January 29, 2019.[3] On July 1, 2019, Commerce issued the *Preliminary Results* and placed additional information on the record of the CCR, pursuant to 19 CFR 351.301(c)(4).[4] On July 5, 2019, Commerce provided interested parties until July 12, 2019 to place additional information on the record in order to ''rebut, clarify, or correct'' the information placed on the record by Commerce.[5]

On July 12, 2019, the National Biodiesel Board Fair Trade Coalition (the petitioner), and LDC and Vicentin submitted additional factual information.[6] On July 29, 2019, the

[1] *See Biodiesel from the Republic of Argentina and the Republic of Indonesia: Countervailing Duty Orders,* 83 FR 552 (January 4, 2018), corrected by *Biodiesel from the Republic of Argentina and the Republic of Indonesia: Countervailing Duty Orders,* 83 FR 3114 (January 23, 2018) (*Order*).

[2] *See Biodiesel from Argentina: Initiation of Changed Circumstances Reviews of the Antidumping and Countervailing Duty Orders,* 83 FR 56300 (November 13, 2018).

[3] *See* Memorandum, ''Deadlines Affected by the Partial Shutdown of the Federal Government,'' dated January 28, 2019.

[4] *See Biodiesel from Argentina: Preliminary Results of Changed Circumstances Reviews of the Antidumping and Countervailing Duty Orders,* 84 FR 32714 (July 9, 2019) (*Preliminary Results*); *see also* Memorandum, ''Additional Information Concerning the Preliminary Changed Circumstances Reviews of Biodiesel,'' dated July 1, 2019.

[5] *See* Memorandum, ''Additional Information Concerning the Preliminary Changed Circumstances Reviews of Biodiesel,'' dated July 5, 2019.

[6] *See* Petitioner's Letter, ''Biodiesel from Argentina: Factual Information Pursuant to 19 CFR 301(c)(4),'' dated July 12, 2019; *see also* LDC Argentina and Vicentin's Letter, ''Biodiesel from

Continued

petitioner requested that Commerce conduct a verification of factual information.[7] The petitioner claimed that there was ''good cause'' to request a verification in this CCR because the ''complexity of the record compel{ed} a more thorough understanding of the GOA's recent export tax modifications.'' [8] Recognizing that verification would impede Commerce's ability to meet its original September 19, 2019 deadline, the petitioner also requested an extension of the final deadline.[9] On August 2, 2019, Commerce temporarily put a hold on the deadlines for case and rebuttal briefs.[10]

Commerce issued its verification agenda to the GOA on August 2, 2019.[11] The petitioner submitted its pre-verification comments on August 19, 2019.[12] Commerce conducted its verification of the GOA on August 26, 2019.[13] On September 5, 2019, Commerce released its verification report regarding the GOA.[14]

On September 5, 2019, Commerce reinstated the deadlines for case and rebuttal briefs.[15] On September 11, 2019, the petitioner requested an indefinite suspension of the deadlines for briefs and the final determination.[16] The petitioner requested that Commerce accept new factual information on September 11, 2019.[17] On September 12, 2019, the GOA responded, stating that a short extension of the deadlines was acceptable.[18] On September 12, 2019, Commerce issued a short extension of deadlines.[19] Commerce rejected the petitioner's request to include new factual information on the record on September 18, 2019.[20]

On September 17, 2019, the petitioner requested a public hearing regarding the CCR.[21] The petitioner and the GOA submitted case briefs on September 17, 2019.[22] On September 23, 2019, the petitioner and the GOA submitted rebuttal briefs.[23] Pursuant to the petitioner's request, Commerce held a public hearing on September 26, 2019.[24]

On October 16, 2019, Commerce placed additional factual information on the record of this proceeding.[25] In response, the petitioner placed additional factual information on the record on October 24, 2019.[26] Between the time Commerce released its Preliminary Results and the publication of these Final Results, Commerce has held numerous phone calls and meetings with parties.[27]

Scope of the Order

The product covered by the *Order* is biodiesel from Argentina. For a complete description of the scope of the *Order,* see the appendix to this notice.

Analysis of Comments Received

We addressed all issues raised in the case and rebuttal briefs by parties to this review in the Issues and Decision Memorandum (I&D Memo).[28] Attached to this notice, in Appendix II, is a list of the issues which parties raised. The I&D Memo is a public document and on file in the Central Records Unit (CRU), Room B8024 of the main Commerce building, as well as electronically via Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System (ACCESS). ACCESS is available to

Argentina: Additional Information Concerning the Preliminary Changed Circumstances Reviews of Biodiesel,'' dated July 12, 2019.

[7] *See* Petitioner's Letter, ''Biodiesel from Argentina: Petitioner's Request for Verification,'' dated July 29, 2019.

[8] *Id.* at 3.

[9] *Id.* at 4–5.

[10] *See* Memorandum, ''Changed Circumstances Reviews of the Antidumping and Countervailing Duty Orders on Biodiesel from Argentina: Holding of Deadlines,'' dated August 2, 2019.

[11] *See* Memorandum, ''Changed Circumstances Review of the Countervailing Duty Order on Biodiesel from Argentina; Verification of Information Submitted by the Government of Argentina,'' dated August 2, 2019.

[12] *See* Petitioner's Letter,'' Biodiesel from Argentina: Coalition's Comments Regarding Commerce's Verification of Government of Argentina,'' dated August 19, 2019.

[13] *See* Memorandum, ''Changed Circumstances Review of the Countervailing Duty Order on Biodiesel from Argentina: Verification Date,'' dated August 7, 2019.

[14] *See* Memorandum, ''Changed Circumstances Reviews of the Antidumping and Countervailing Duty Orders on Biodiesel from Argentina: Publication of Verification Report and Reinstatement of Deadlines,'' dated September 5, 2019.

[15] *See* Memorandum, ''Changed Circumstances Reviews of the Antidumping and Countervailing Duty Orders on Biodiesel from Argentina: Publication of Verification Report and Reinstatement of Deadlines,'' dated September 5, 2019.

[16] *See* Petitioner's Letter, ''Biodiesel from Argentina: Request for Meeting and Extension of Briefing Schedule,'' dated September 11, 2019.

[17] *See* Petitioner's Letter, ''Biodiesel from Argentina: Request to Expand Record to Include Factual Information Regarding Political Developments in Argentina,'' dated September 11, 2019.

[18] *See* GOA's Letter, ''Biodiesel from Argentina: Response from the GOA to Petitioner's Request for Meeting and Extension of Briefing Schedule,'' dated September 12, 2019.

[19] *See* Memorandum, Changed Circumstances Reviews of the Antidumping and Countervailing Duty Orders on Biodiesel from Argentina: Deadline for Case and Rebuttal Briefs and Hearing Requests; Rejection of New Factual Information,'' dated September 12, 2019.

[20] *See* Memorandum, ''Changed Circumstances Review of the Countervailing Duty Order on Biodiesel from Argentina: Rejection of Document from the Administrative Record,'' dated September 18, 2019.

[21] *See* Petitioner's Letter, ''Biodiesel from Argentina: Petitioner's Hearing Request,'' dated September 17, 2019.

[22] *See* Petitioner's Case Brief, ''Biodiesel from Argentina: Petitioner's Case Brief,'' dated September 17, 2019; *see also* GOA's Case Brief, ''Biodiesel from Argentina Changed Circumstances Review: Government of Argentina Case Brief and Statement with Respect to Public Hearing,'' dated September 17, 2019.

[23] *See* Petitioner's Rebuttal Brief, ''Biodiesel from Argentina: Rebuttal Brief on Behalf of the National Biodiesel Board Fair Trade Coalition,'' dated September 23, 2019 (Petitioner's Rebuttal Brief); *see also* GOA's Rebuttal Brief, ''Biodiesel from Argentina: Rebuttal Brief in AD Changed Circumstances Review,'' dated September 23, 2019.

[24] *See* Hearing Transcript, ''In the Matter of: The Changed Circumstances Review of the Countervailing Duty Order on Biodiesel from Argentina,'' dated September 26, 2019.

[25] *See* Memorandum, ''*Ex Parte* Meeting with the National Biodiesel Board and the American Soybean Association,'' dated October 16, 2019.

[26] *See* Petitioner's Letter, ''Biodiesel from Argentina: Petitioners' Submission to Rebut, Clarify, or Correct Information Placed on the Record,'' dated October 24, 2019.

[27] Memorandum, ''Email Exchange with Governor Kim Reynolds,'' dated July 16, 2019, Memorandum, ''*Ex Parte* Discussion with Governor Kim Reynolds,'' dated July 25, 2019, Memorandum, ''*Ex Parte* Discussion with Congressman Darin LaHood,'' dated July 25, 2019, Memorandum, ''*Ex Parte* Discussion with Senator Alexander's Office,'' dated July 30, 2019, Memorandum, ''Correspondence with Minister Dante Sica,'' dated August 15, 2019, Memorandum, ''Correspondence with Several U.S. Senators,'' dated August 15, 2019, Memorandum, ''*Ex Parte* Discussions with the Government of Argentina,'' dated August 28, 2019, Memorandum, ''*Ex Parte* Discussion with National Biodiesel Board,'' dated September 12, 2019, Memorandum, ''*Ex Parte* Meeting with Senator Grassley's Staff Regarding Biodiesel Changed Circumstances Reviews,'' dated September 27, 2019, Memorandum, ''*Ex Parte* Meeting with National Biodiesel Board,'' dated September 30, 2019, Memorandum, ''*Ex Parte* Meeting with the National Biodiesel Board and the American Soybean Association,'' dated October 16, 2019, Memorandum, ''Ex Parte Meeting with the Petitioners,'' dated October 18, 2019, Memorandum, ''*Ex Parte* Meeting with the Government of Argentina,'' dated October 18, 2019, Memorandum, ''Telephone call with Argentine Embassy Official Regarding Changed Circumstances Reviews (CCR) of Biodiesel from Argentina,'' dated December 9, 2019, Memorandum, ''Telephone call with Representative Darin LaHood to discuss Changed Circumstances Review (CCR) of Biodiesel from Argentina,'' dated November 26, 2019, Memorandum, ''Telephone call with Senator Chuck Grassley to discuss Changed Circumstances Reviews (CCR) of Biodiesel from Argentina,'' dated November 26, 2019, Memorandum, ''Telephone call with Ambassador Fernando Oris de Roa to discuss Changed Circumstances Reviews (CCR) of Biodiesel from Argentina,'' dated December 5, 2019, Memorandum, ''Telephone call with the National Biodiesel Board to discuss Changed Circumstances Reviews of Biodiesel from Argentina,'' dated December 19, 2019, Memorandum, ''Telephone call with Senator Chuck Grassley to discuss Changed Circumstances Reviews of Biodiesel from Argentina,'' dated December 19, 2019, and Memorandum, ''Telephone call with Congressman Darin LaHood,'' dated March 19, 2020.

[28] *See* Memorandum, ''Issues and Decision Memorandum for the Final Results of Antidumping Duty Changed Circumstances Review: Biodiesel from Argentina,'' dated concurrently with, and hereby adopted by, this notice.

registered users at *http://access.trade.gov.* In addition, a complete version of the I&D Memo can be accessed directly on the internet at *http://enforcement.trade.gov/frn/index.html.* The signed I&D Memo and the electronic versions of the I&D Memo are identical in content.

Final Results of Changed Circumstances Review

Pursuant to section 751(b)(1) of the Tariff Act of 1930, as amended (the Act), and 19 CFR 351.216, Commerce has determined that sufficient changed circumstances warranting a cash deposit adjustment do not exist. As explained in the I&D Memo, Argentina's export tax regime is in flux, leading Commerce to conclude that there are not sufficient changed circumstances to warrant such an adjustment. Therefore, Commerce is making no changes to the cash deposit rates as listed in the order.

Administrative Protective Order (APO)

This notice also serves as a reminder to parties subject to APO of their responsibility concerning the disposition of proprietary information disclose under APO in accordance with 19 CFR 351.305(a)(3). Timely written notification of the return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of APO is a sanctionable violation.

Notification to Interested Parties

We are issuing and publishing these final results and notice in accordance with sections 751(b)(1) and 777(i) of the Act, and 19 CFR 351.216 and 19 CFR 351.222.

Dated: May 5, 2020.

Jeffrey I. Kessler,

Assistant Secretary for Enforcement and Compliance.

Appendix I

Scope of the Order

The product covered by this order is biodiesel, which is a fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, including biologically-based waste oils or greases, and other biologically-based oil or fat sources. The order covers biodiesel in pure form (B100) as well as fuel mixtures containing at least 99 percent biodiesel by volume (B99). For fuel mixtures containing less than 99 percent biodiesel by volume, only the biodiesel component of the mixture is covered by the scope of the order.

Biodiesel is generally produced to American Society for Testing and Materials International (ASTM) D6751 specifications, but it can also be made to other specifications. Biodiesel commonly has one of the following Chemical Abstracts Service (CAS) numbers, generally depending upon the feedstock used: 67784–80–9 (soybean oil methyl esters); 91051–34–2 (palm oil methyl esters); 91051–32–0 (palm kernel oil methyl esters); 73891–99–3 (rapeseed oil methyl esters); 61788–61–2 (tallow methyl esters); 68990–52–3 (vegetable oil methyl esters); 129828–16–6 (canola oil methyl esters); 67762–26–9 (unsaturated alkylcarboxylic acid methyl ester); or 68937–84–8 (fatty acids, C12–C18, methyl ester).

The B100 product subject to the order is currently classifiable under subheading 3826.00.1000 of the Harmonized Tariff Schedule of the United States (HTSUS), while the B99 product is currently classifiable under HTSUS subheading 3826.00.3000. Although the HTSUS subheadings, ASTM specifications, and CAS numbers are provided for convenience and customs purposes, the written description of the scope is dispositive.

Attachment II

List of Topics Discussed in the Issues and Decision Memorandum

I. Summary
II. Background
III. Final Results of Review
IV. Discussion of the Issues
  Comment 1: Relevance of the GOA's Changes after the Preliminary Results
  Comment 2: Whether Commerce Properly Initiated the CCR
  Comment 3: Whether Commerce Properly Conducted the CCR
  Comment 4: Whether a Financial Contribution Still Exists
V. Recommendation

[FR Doc. 2020–10129 Filed 5–11–20; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–357–820]

Biodiesel From Argentina: Final Results of Antidumping Duty Changed Circumstances Review

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

SUMMARY: On July 9, 2019, the Department of Commerce (Commerce) published the preliminary results of the changed circumstances review (CCR) of the antidumping duty (AD) order on biodiesel from Argentina. For these final results, Commerce continues to find that there are insufficient changed circumstances to warrant any revisions under the AD order.

DATES: Applicable May 12, 2020.

FOR FURTHER INFORMATION CONTACT: Mark Hoadley, AD/CVD Operations, Office VII, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–3148.

SUPPLEMENTARY INFORMATION:

Background

On April 26, 2018, Commerce published the AD order on biodiesel from Argentina.[1] On November 13, 2018, in response to a request submitted by the Government of Argentina (GOA), joined by Vicentin S.A.I.C. (Vicentin) and LDC Argentina (LDC), Commerce initiated a CCR for both the AD and countervailing duty (CVD) orders.[2] Commerce exercised its discretion to toll all deadlines affected by the partial federal government closure from December 22, 2018 through the resumption of operations on January 29, 2019.[3] On July 1, 2019, Commerce issued the *Preliminary Results* and placed additional information on the record of the CCR, pursuant to 19 CFR 351.301(c)(4).[4] Commerce preliminarily found that the ''particular market situation'' regarding the price of soybeans as an element of the cost of production of biodiesel in Argentina still existed,[5] and that no changes under the AD order were warranted as a result of the changed circumstances presented by the GOA. In accordance with 19 CFR 351.309, Commerce invited parties to comment on the *Preliminary Results.* On July 5, 2019, Commerce provided interested parties until July 12, 2019 to place additional information on the record in order to ''rebut, clarify, or correct'' the information placed on the record by Commerce.[6]

On July 12, 2019, the National Biodiesel Board Fair Trade Coalition (the petitioner), and LDC and Vicentin submitted additional factual information.[7] On August 2, 2019,

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[1] *See Biodiesel from the Republic of Argentina and Indonesia: Antidumping Duty Orders,* 83 FR 18279 (April 26, 2018) (*Order*).

[2] *See Biodiesel from Argentina: Initiation of Changed Circumstances Reviews of the Antidumping and Countervailing Duty Orders,* 83 FR 56300 (November 13, 2018).

[3] *See* Memorandum, ''Deadlines Affected by the Partial Shutdown of the Federal Government,'' dated January 28, 2019.

[4] *See Biodiesel from Argentina: Preliminary Results of Changed Circumstances Reviews of the Antidumping and Countervailing Duty Orders,* 84 FR 32714 (July 9, 2019) (*Preliminary Results*); *see also* Memorandum, ''Additional Information Concerning the Preliminary Changed Circumstances Reviews of Biodiesel,'' dated July 1, 2019.

[5] *See Preliminary Results,* 84 FR at 32716–17.

[6] *See* Memorandum, ''Additional Information Concerning the Preliminary Changed Circumstances Reviews of Biodiesel,'' dated July 5, 2019.

[7] *See* Petitioner's Letter, ''Biodiesel from Argentina: Factual Information Pursuant to 19 CFR 301(c)(4),'' dated July 12, 2019; *see also* LDC Argentina and Vicentin's Letter, ''Biodiesel from

Continued

Commerce put a hold on the deadlines for case and rebuttal briefs.[8] On September 5, 2019, Commerce reinstated deadlines for case and rebuttal briefs.[9]

On September 11, 2019, the petitioner requested an indefinite suspension of the deadlines for briefs and the final determination.[10] On September 12, 2019, the GOA responded, stating that a short extension of the deadlines would be acceptable.[11] On September 12, 2019, Commerce issued a short extension of the deadlines.[12] The petitioner and the GOA submitted case briefs on September 17, 2019.[13] On September 23, 2019, the petitioner and the GOA submitted rebuttal briefs.[14]

On October 16, 2019, Commerce placed additional factual information on the record of this proceeding.[15] In response, the petitioner placed additional factual information on the record on October 24, 2019.[16] Between the time Commerce released its *Preliminary Results* and the publication of these final results, Commerce has held numerous phone calls and meetings with parties.[17]

Scope of the Order

The product covered by the *Order* is biodiesel from Argentina. For a complete description of the scope of the *Order, see* Appendix I of this notice.

Analysis of Comments Received

We addressed all issues raised in the case and rebuttal briefs by parties to this review in the Issues and Decision Memorandum (I&D Memo).[18] Attached to this notice, in Appendix II, is a list of the issues which parties raised. The I&D Memo is a public document and on file in the Central Records Unit (CRU), Room B8024 of the main Commerce building, as well as electronically via Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System (ACCESS). ACCESS is available to registered users at *http://access.trade.gov.* In addition, a complete version of the I&D Memo can be accessed directly on the internet at *http://enforcement.trade.gov/frn/index.html.* The signed I&D Memo and the electronic versions of the I&D Memo are identical in content.

Final Results of Changed Circumstances Review

Pursuant to section 751(b)(1) of the Tariff Act of 1930, as amended (the Act), and 19 CFR 351.216, Commerce determines that there are insufficient changed circumstances to warrant any changes under the AD *Order.*

Cash Deposit Requirements and Assessment

In light of our final results, Commerce is not issuing instructions to U.S. Customs and Border Protection.

Administrative Protective Order (APO)

This notice also serves as a reminder to parties subject to APO of their responsibility concerning the disposition of proprietary information disclose under APO in accordance with 19 CFR 351.305(a)(3). Timely written notification of the return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of APO is a sanctionable violation.

Notification to Interested Parties

We are issuing and publishing these final results and notice in accordance with sections 751(b)(1) and 777(i) of the Act, and 19 CFR 351.216 and 19 CFR 351.222.

Dated: May 5, 2020.

Jeffrey I. Kessler,

Assistant Secretary for Enforcement and Compliance.

Appendix I

Scope of the Order

The product covered by this order is biodiesel, which is a fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, including biologically-based waste oils or greases, and other biologically-based oil or fat sources. The order covers biodiesel in pure form (B100) as well as fuel mixtures containing at least 99 percent biodiesel by volume (B99). For fuel mixtures containing less than 99 percent biodiesel by volume, only the biodiesel component of the mixture is covered by the scope of the order.

Biodiesel is generally produced to American Society for Testing and Materials International (ASTM) D6751 specifications, but it can also be made to other specifications. Biodiesel commonly has one of the following Chemical Abstracts Service

Argentina: Additional Information Concerning the Preliminary Changed Circumstances Reviews of Biodiesel,'' dated July 12, 2019.

[8] *See* Memorandum, ''Changed Circumstances Reviews of the Antidumping and Countervailing Duty Orders on Biodiesel from Argentina: Holding of Deadlines,'' dated August 2, 2019.

[9] *See* Memorandum, ''Changed Circumstances Reviews of the Antidumping and Countervailing Duty Orders on Biodiesel from Argentina: Publication of Verification Report and Reinstatement of Deadlines,'' dated September 5, 2019.

[10] *See* Petitioner's Letter, ''Biodiesel from Argentina: Request for Meeting and Extension of Briefing Schedule,'' dated September 11, 2019.

[11] *See* GOA's Letter, ''Biodiesel from Argentina: Response from the GOA to Petitioner's Request for Meeting and Extension of Briefing Schedule,'' dated September 12, 2019.

[12] *See* Memorandum, ''Changed Circumstances Reviews of the Antidumping and Countervailing Duty Orders on Biodiesel from Argentina: Deadline for Case and Rebuttal Briefs and Hearing Requests; Rejection of New Factual Information,'' dated September 12, 2019.

[13] *See* Petitioner's Case Brief, ''Biodiesel from Argentina: Petitioner's Case Brief,'' dated September 17, 2019 (Petitioner's Case Brief); *see also* GOA's Case Brief, ''Biodiesel from Argentina Changed Circumstances Review: Government of Argentina Case Brief and Statement with Respect to Public Hearing,'' dated September 17, 2019 (GOA's Case Brief).

[14] *See* Petitioner's Rebuttal Brief, ''Biodiesel from Argentina: Rebuttal Brief on Behalf of the National Biodiesel Board Fair Trade Coalition,'' dated September 23, 2019 (Petitioner's Rebuttal Brief); *see also* GOA's Rebuttal Brief, ''Biodiesel from Argentina: Rebuttal Brief in AD Changed Circumstances Review,'' dated September 23, 2019 (GOA's Rebuttal Brief).

[15] *See* Memorandum, ''*Ex Parte* Meeting with the National Biodiesel Board and the American Soybean Association,'' dated October 16, 2019.

[16] *See* Petitioner's Letter, ''Biodiesel from Argentina: Petitioners' Submission to Rebut, Clarify, or Correct Information Placed on the Record,'' dated October 24, 2019.

[17] Memorandum, ''Email Exchange with Governor Kim Reynolds,'' dated July 16, 2019, Memorandum, ''*Ex Parte* Discussion with Governor Kim Reynolds,'' dated July 25, 2019, Memorandum, ''*Ex Parte* Discussion with Congressman Darin LaHood,'' dated July 25, 2019, Memorandum, ''*Ex Parte* Discussion with Senator Alexander's Office,'' dated July 30, 2019, Memorandum, ''Correspondence with Minister Dante Sica,'' dated August 15, 2019, Memorandum, ''Correspondence with Several U.S. Senators,'' dated August 15, 2019, Memorandum, ''*Ex Parte* Discussions with the Government of Argentina,'' dated August 28, 2019, Memorandum, ''*Ex Parte* Discussion with National Biodiesel Board,'' dated September 12, 2019, Memorandum, ''*Ex Parte* Meeting with Senator Grassley's Staff Regarding Biodiesel Changed Circumstances Reviews,'' dated September 27, 2019, Memorandum, ''*Ex Parte* Meeting with National Biodiesel Board,'' dated September 30, 2019, Memorandum, ''*Ex Parte* Meeting with the National Biodiesel Board and the American Soybean Association,'' dated October 16, 2019, Memorandum, ''Ex Parte Meeting with the Petitioners,'' dated October 18, 2019, Memorandum, ''*Ex Parte* Meeting with the Government of Argentina,'' dated October 18, 2019, Memorandum, ''Telephone call with Argentine Embassy Official Regarding Changed Circumstances Reviews (CCR) of Biodiesel from Argentina,'' dated December 9, 2019, Memorandum, ''Telephone call with Representative Darin LaHood to discuss Changed Circumstances Review (CCR) of Biodiesel from Argentina,'' dated November 26, 2019, Memorandum, ''Telephone call with Senator Chuck Grassley to discuss Changed Circumstances Reviews (CCR) of Biodiesel from Argentina,'' dated November 26, 2019, Memorandum, ''Telephone call with Ambassador Fernando Oris de Roa to discuss Changed Circumstances Reviews (CCR) of Biodiesel from Argentina,'' dated December 5, 2019, Memorandum, ''Telephone call with the National Biodiesel Board to discuss Changed Circumstances Reviews of Biodiesel from Argentina,'' dated December 19, 2019, Memorandum, ''Telephone call with Senator Chuck Grassley to discuss Changed Circumstances Reviews of Biodiesel from Argentina,'' dated December 19, 2019, and Memorandum, ''Telephone call with Congressman Darin LaHood,'' dated March 19, 2020.

[18] *See* Memorandum, ''Issues and Decision Memorandum for the Final Results of Antidumping Duty Changed Circumstances Review: Biodiesel from Argentina,'' dated concurrently with, and hereby adopted by, this notice.

(CAS) numbers, generally depending upon the feedstock used: 67784–80–9 (soybean oil methyl esters); 91051–34–2 (palm oil methyl esters); 91051–32–0 (palm kernel oil methyl esters); 73891–99–3 (rapeseed oil methyl esters); 61788–61–2 (tallow methyl esters); 68990–52–3 (vegetable oil methyl esters); 129828–16–6 (canola oil methyl esters); 67762–26–9 (unsaturated alkylcarboxylic acid methyl ester); or 68937–84–8 (fatty acids, C12–C18, methyl ester).

The B100 product subject to the order is currently classifiable under subheading 3826.00.1000 of the Harmonized Tariff Schedule of the United States (HTSUS), while the B99 product is currently classifiable under HTSUS subheading 3826.00.3000. Although the HTSUS subheadings, ASTM specifications, and CAS numbers are provided for convenience and customs purposes, the written description of the scope is dispositive.

Attachment II

List of Topics Discussed in the Issues and Decision Memorandum

I. Summary
II. Background
III. Final Results of Review
IV. Discussion of the Issues
  Comment 1: Relevance of the GOA's Changes after the Preliminary Results
  Comment 2: Whether Commerce Properly Initiated the CCR
  Comment 3: Whether a Particular Market Situation Still Exists
V. Recommendation

[FR Doc. 2020–10128 Filed 5–11–20; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–580–905]

4th Tier Cigarettes From the Republic of Korea: Postponement of Preliminary Determination in the Less-Than-Fair-Value Investigation

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

DATES: Applicable May 12, 2020.

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 January 7, 2020, the Department of Commerce (Commerce) initiated a less-than-fair-value (LTFV) investigation of imports of 4th Tier Cigarettes (cigarettes) from the Republic of Korea.[1] Currently, the preliminary determination is due no later than May 26, 2020.

Postponement of Preliminary Determination

Section 733(b)(1)(A) of the Tariff Act of 1930, as amended (the Act), requires Commerce to issue the preliminary determination in an LTFV investigation within 140 days after the date on which Commerce initiated the investigation. However, section 733(c)(1) of the Act permits Commerce to postpone the preliminary determination until no later than 190 days after the date on which Commerce initiated the investigation if: (A) The petitioner makes a timely request for a postponement; or (B) Commerce concludes that the parties concerned are cooperating, that the investigation is extraordinarily complicated, and that additional time is necessary to make a preliminary determination. Under 19 CFR 351.205(e), the petitioner must submit a request for postponement 25 days or more before the scheduled date of the preliminary determination and must state the reasons for the request. Commerce will grant the request unless it finds compelling reasons to deny the request.

On April 28, 2020, the petitioner[2] submitted a timely request that Commerce postpone the preliminary determination in this LTFV investigation.[3] The petitioner requests that Commerce fully extend the deadline for the preliminary determination to issue, if necessary, supplemental questionnaires and receive responses to those supplemental questionnaires, and ''allow all parties ample time to fully and accurately analyze the information on this record prior to the preliminary determination and ensure an accurate preliminary calculation of dumping margins.''[4]

For the reasons stated above and because there are no compelling reasons to deny the request, Commerce, in accordance with section 733(c)(1)(A) of the Act, is postponing the deadline for the preliminary determination by 50 days (*i.e.,* 190 days after the date on which this investigation was initiated). As a result, Commerce will issue its preliminary determination no later than July 15, 2020. In accordance with section 735(a)(1) of the Act and 19 CFR 351.210(b)(1), the deadline for the final determination in this investigation will continue to be 75 days after the date of the preliminary determination, unless postponed.

Notification to Interested Parties

This notice is issued and published pursuant to section 733(c)(2) of the Act and 19 CFR 351.205(f)(1).

Dated: May 6, 2020.

Jeffrey I. Kessler,

Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2020–10130 Filed 5–11–20; 8:45 am]

BILLING CODE 3510–DS–P

[1] *See 4th Tier Cigarettes from the Republic of Korea: Initiation of Less-Than-Fair-Value Investigation,* 85 FR 2390 (January 15, 2020).

[2] The petitioner is the Coalition Against Korean Cigarettes.

[3] *See* Petitioner's Letter, ''4th Tier Cigarettes from the Republic of Korea: Request to Postpone Preliminary Determination,'' dated April 28, 2020.

[4] *Id.* at 2.

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; Large Pelagic Fishing Survey

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 7, 2020, during a 60-day comment period. This notice allows for an additional 30 days for public comments.

Agency: National Oceanic and Atmospheric Administration (NOAA).

Title: Large Pelagic Fishing Survey.

OMB Control Number: 0648–0380.

Form Number(s): None.

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

Number of Respondents: 15,024.

Average Hours per Response: 11 minutes for a telephone interview; 5 minutes for a dockside interview; 1½ minutes to respond to a follow-up validation call for dockside interviews; 1 minute for a biological sampling of catch.

Total Annual Burden Hours: 3,608.

Needs and Uses: This request is for extension of a currently approved

information collection. The Large Pelagic Fishing Survey consists of dockside and telephone surveys of recreational anglers for large pelagic fish (tunas, sharks, and billfish) in the Atlantic Ocean. The survey provides the National Marine Fisheries Service (NMFS) with information to monitor catch of bluefin tuna, marlin and other federally managed species. Catch monitoring in these fisheries and collection of catch and effort statistics for all pelagic fish is required under the Atlantic Tunas Convention Act and the Magnuson-Stevens Fishery Conservation and Management Act. Telephone survey portion species-level response options have been updated to include blue marlin, roundscale spearfish, and porbeagle beginning in 2020. The information collected by the Large Pelagic Fishing Survey is essential for the United States (U.S.) to meet its reporting obligations to the International Commission for the Conservation of Atlantic Tuna.

Affected Public: Business or other for-profit organizations.

Frequency: Annually, weekly, or on occasion.

Respondent's Obligation: Mandatory.

Legal Authority: Atlantic Tunas Convention Act and the Magnuson-Stevens Fishery Conservation and Management Act.

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 0648–0380.

Sheleen Dumas,

Department PRA Clearance Officer, Office of the Chief Information Officer, Commerce Department.

[FR Doc. 2020–10046 Filed 5–11–20; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XA167]

New England Fishery Management Council; Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; public meeting.

SUMMARY: The New England Fishery Management Council (Council) is scheduling a public meeting of its Scallop Committee via webinar to consider actions affecting New England fisheries in the exclusive economic zone (EEZ). Recommendations from this group will be brought to the full Council for formal consideration and action, if appropriate.

DATES: This meeting will be held on Thursday, May 28, 2020 at 9 a.m. via webinar.

ADDRESSES: All meeting participants and interested parties can register to join the webinar at *https://attendee.gotowebinar.com/register/4987533584278529548.*

Council address: New England Fishery Management Council, 50 Water Street, Mill 2, Newburyport, MA 01950.

FOR FURTHER INFORMATION CONTACT: Thomas A. Nies, Executive Director, New England Fishery Management Council; telephone: (978) 465–0492.

SUPPLEMENTARY INFORMATION:

Agenda

The Scallop Committee plan to develop research recommendations for the 2021/22 Scallop Research Set-Aside (RSA) federal funding announcement. The committee will discuss the impacts of COVID–19: Timing and outlook for 2020 surveys and 2021/22 specifications process. They will also receive an update from NMFS on status of Council's emergency action request. Other business may be discussed, as necessary.

Although non-emergency issues not contained in this agenda may come before this group for discussion, those issues may not be the subject of formal action during this meeting. Action will be restricted to those issues specifically listed in this notice and any issues arising after publication of this notice that require emergency action under section 305(c) of the Magnuson-Stevens Act, provided the public has been notified of the Council's intent to take final action to address the emergency.

Special Accommodations

This meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Thomas A. Nies, Executive Director, at (978) 465–0492, at least 5 days prior to the meeting date. Consistent with 16 U.S.C. 1852, a copy of the recording is available upon request.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: May 7, 2020.

Tracey L. Thompson,

Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2020–10115 Filed 5–11–20; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XA173]

Mid-Atlantic Fishery Management Council (MAFMC); Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; public meeting.

SUMMARY: The Mid-Atlantic Fishery Management Council's Mackerel, Squid, and Butterfish (MSB) Monitoring Committee will meet via webinar to develop recommendations for MSB specifications, focusing on the *Illex* squid fishery.

DATES: The meeting will be held on Wednesday, May 27, 2020, from 9 a.m. to noon.

ADDRESSES: The meeting will be held via webinar. Details on the proposed agenda, connection information, and briefing materials will be posted at the MAFMC website: *www.mafmc.org.*

Council address: Mid-Atlantic Fishery Management Council, 800 N. State Street, Suite 201, Dover, DE 19901; telephone: (302) 674–2331; *www.mafmc.org.*

FOR FURTHER INFORMATION CONTACT: Christopher M. Moore, Ph.D., Executive Director, Mid-Atlantic Fishery Management Council, telephone: (302) 526–5255.

SUPPLEMENTARY INFORMATION: The MSB Monitoring Committee will develop recommendations for MSB specifications, focusing on the *Illex* squid fishery.

Special Accommodations

The meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aid should be directed to M. Jan Saunders, (302) 526–5251, at least 5 days prior to any meeting date.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: May 7, 2020.

Tracey L. Thompson,

Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2020–10109 Filed 5–11–20; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[RTID 0648–XA157]

Mid-Atlantic Fishery Management Council (MAFMC); Public Meeting

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; public meeting.

SUMMARY: The Mid-Atlantic Fishery Management Council's Summer Flounder, Scup, and Black Sea Bass Monitoring Committee will hold a public webinar meeting.

DATES: The meeting will be held on Thursday, May 28, 2020, from 9 a.m. to 12 p.m. For agenda details, see **SUPPLEMENTARY INFORMATION**.

ADDRESSES: The meeting will be held via webinar, which can be accessed at: *http://mafmc.adobeconnect.com/sfsbsb-mc-may2020/.* Meeting audio can be accessed by following the prompts which appear after logging into the webinar, or via telephone by dialing 1–800–832–0736 and entering room number 5068871.

Council address: Mid-Atlantic Fishery Management Council, 800 N State Street, Suite 201, Dover, DE 19901; telephone: (302) 674–2331; *www.mafmc.org.*

FOR FURTHER INFORMATION CONTACT: Christopher M. Moore, Ph.D., Executive Director, Mid-Atlantic Fishery Management Council, telephone: (302) 526–5255.

SUPPLEMENTARY INFORMATION: The Summer Flounder, Scup, and Black Sea Bass Monitoring Committee will meet via webinar to discuss management measures for all three species. Specifically, they will discuss the ongoing Recreational Reform Initiative which considers potential improvements to the process used to develop recreational management measures. They will also discuss potential changes to the February 2021 black sea bass recreational fishery to account for recent revisions to recreational data. They may also discuss topics related to commercial management measures, including but not limited to the minimum trawl mesh sizes for all three species and an evaluation of commercial scup discards. Meeting materials will be posted to *www.mafmc.org.*

Special Accommodations

The meeting is physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to M. Jan Saunders at the Mid-Atlantic Council Office (302) 526–5251 at least five days prior to the meeting date.

Authority: 16 U.S.C.1801 *et seq.*

Dated: May 7, 2020.

Tracey L. Thompson,

Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 2020–10114 Filed 5–11–20; 8:45 am]

BILLING CODE 3510–22–P

COMMITTEE FOR PURCHASE FROM PEOPLE WHO ARE BLIND OR SEVERELY DISABLED

Procurement List; Proposed Additions and Deletions

AGENCY: Committee for Purchase From People Who Are Blind or Severely Disabled.

ACTION: Proposed additions to and deletions from the Procurement List.

SUMMARY: The Committee is proposing to add products to the Procurement List that will be furnished by nonprofit agencies employing persons who are blind or have other severe disabilities, and deletes products and a service previously furnished by such agencies.

DATES: Comments must be received on or before: June 7, 2020.

ADDRESSES: Committee for Purchase From People Who Are Blind or Severely Disabled, 1401 S Clark Street, Suite 715, Arlington, Virginia 22202–4149.

FOR FURTHER INFORMATION CONTACT: For further information or to submit comments contact: Michael R. Jurkowski, Telephone: (703) 603–2117, Fax: (703) 603–0655, or email *CMTEFedReg@AbilityOne.gov.*

SUPPLEMENTARY INFORMATION: This notice is published pursuant to 41 U.S.C. 8503 (a)(2) and 41 CFR 51–2.3. Its purpose is to provide interested persons an opportunity to submit comments on the proposed actions.

Additions

If the Committee approves the proposed addition, the entities of the Federal Government identified in this notice will be required to procure the product listed below from nonprofit agencies employing persons who are blind or have other severe disabilities.

The following product is proposed for addition to the Procurement List for production by the nonprofit agencies listed:

Product

NSN—Product Name: MR 13064—Set, Pan, Spring Form, 3 Piece
Mandatory Source of Supply: Winston-Salem Industries for the Blind, Inc., Winston-Salem, NC
Contracting Activity: Military Resale-Defense Commissary Agency

Deletions

The following products and service are proposed for deletion from the Procurement List:

Products

NSNs—Product Names:
7510–01–545–3777—DAYMAX System, 2019 Calendar Pad, Type I
7510–01–545–3732—DAYMAX System, 2019, Calendar Pad, Type II
Mandatory Source of Supply: Anthony Wayne Rehabilitation Ctr for Handicapped and Blind, Inc., Fort Wayne, IN
Contracting Activity: GSA/FAS ADMIN SVCS ACQUISITION BR(2, NEW YORK, NY

Service

Service Type: Grounds Maintenance, Janitorial
Mandatory for: Customs and Border Protection, El Centro Sector, 1111 N. Imperial Avenue, El Centro, CA
Mandatory Source of Supply: ARC-Imperial Valley, El Centro, CA
Contracting Activity: U.S. CUSTOMS AND BORDER PROTECTION, BORDER ENFORCEMENT CTR DIV

Michael R. Jurkowski,

Deputy Director, Business & PL Operations.

[FR Doc. 2020–09896 Filed 5–11–20; 8:45 am]

BILLING CODE 6353–01–P

U.S. INTERNATIONAL DEVELOPMENT FINANCE CORPORATION

Notice of Public Hearing

AGENCY: U.S. International Development Finance Corporation.

ACTION: Announcement of public hearing.

SUMMARY: The Board of Directors of the U.S. International Development Finance

Corporation (''DFC'') will hold a public hearing on June 3, 2020. This hearing will afford an opportunity for any person to present views in accordance with Section 1413(c) of the BUILD Act of 2018. Those wishing to present at the hearing must provide advance notice to the agency as detailed below.

DATES: *Public hearing:* 2:00 p.m., Wednesday, June 3, 2020.

Deadline for notifying agency of an intent to attend or present at the public hearing: 5:00 p.m., Wednesday, May 27, 2020.

Deadline for submitting a written statement: 5:00 p.m., Wednesday, May 27, 2020.

ADDRESSES: *Public hearing:* Virtual; Access information provided at the time of attendance registration.

You may send notices of intent to attend, present, or submit a written statement to Catherine F. I. Andrade, DFC Corporate Secretary, via email at *candrade@dfc.gov.*

Instructions: A notice of intent to attend the public hearing or to present at the public hearing must include the individual's name, title, organization, address, email, telephone number, and a concise summary of the subject matter to be presented. Oral presentations may not exceed five (5) minutes. The time for individual presentations may be reduced proportionately, if necessary, to afford all participants who have submitted a timely request an opportunity to be heard. Submission of written statements must include the individual's name, title, organization, address, email, and telephone number. The statement must be typewritten, double-spaced, and may not exceed ten (10) pages.

FOR FURTHER INFORMATION CONTACT: Catherine F. I. Andrade, DFC Corporate Secretary, (202) 336–8768, or *candrade@dfc.gov.*

SUPPLEMENTARY INFORMATION: The public hearing will take place via video- and teleconference. Upon registering, participants and observers will be provided instructions on accessing the hearing. DFC will prepare an agenda for the hearing identifying speakers, setting forth the subject on which each participant will speak, and the time allotted for each presentation. The agenda will be available at the time of the hearing.

Authority: 22 U.S.C. 9613(c)

Catherine F. I. Andrade,

DFC Corporate Secretary.

[FR Doc. 2020–10136 Filed 5–11–20; 8:45 am]

BILLING CODE 3210–02–P

DEPARTMENT OF ENERGY

Notice of Availability of Guidance and Application for Hydroelectric Incentive Program

AGENCY: Water Power Technologies Office, Office of Energy Efficiency and Renewable Energy, Department of Energy.

ACTION: Notice of availability of guidance and open application period.

SUMMARY: The U.S. Department of Energy (DOE) gives notice of updated guidance for the Energy Policy Act of 2005 program. The guidance describes the hydroelectric incentive payment requirements and explains the type of information that owners or authorized operators of qualified hydroelectric facilities must provide DOE when applying for hydroelectric incentive payments. This incentive is available for electric energy generated and sold for a specified 10-year period as authorized under the Energy Policy Act of 2005. In Congressional appropriations for Federal fiscal year 2020, DOE received funds to support this hydroelectric incentive program. At this time, DOE is only accepting applications from owners and authorized operators of qualified hydroelectric facilities for hydroelectricity generated and sold in calendar year 2019.

DATES: DOE is currently accepting applications from May 12, 2020 through July 13, 2020. Applications must be sent to *hydroincentive@ee.doe.gov* by midnight EDT, July 13, 2020, or they will not be considered timely filed for calendar year 2019 incentive payments.

ADDRESSES: Interested parties are to submit applications electronically to *hydroincentive@ee.doe.gov.* DOE's May 2020 Guidance is available at: *https://www.energy.gov/eere/water/water-power-funding-opportunities.*

FOR FURTHER INFORMATION CONTACT: Questions may be addressed to Corey Vezina, U.S. Department of Energy, Golden Field Office, 15013 Denver West Parkway, Golden, CO 80401, (240) 562–1382 or by email at *hydroincentive@ee.doe.gov.* Further instruction can be found in the May 2020 Guidance posted at *https://www.energy.gov/eere/water/water-power-funding-opportunities. Electronic communications are recommended for correspondence and required for submission of application information.*

SUPPLEMENTARY INFORMATION: In the Energy Policy Act of 2005 (EPAct 2005; Pub. L. 109–58), Congress established a new program to support the expansion of hydropower energy development at existing dams and impoundments through an incentive payment procedure. Under Section 242 of EPAct 2005, the Secretary of Energy is directed to provide incentive payments to the owner or authorized operator of qualified hydroelectric facilities for energy generated and sold by a qualified hydroelectric facility for a specified 10-year period (*See* 42 U.S.C. 15881). The 2020 Further Consolidated Appropriations Act authorized funding for the Section 242 program for conventional hydropower under EPAct 2005. In FY 2020, DOE allocated $7M for this purpose.

Recently DOE made minor updates to clarify its Guidance for the Energy Policy Act of 2005 Section 242. The May 2020 Guidance is available at: *https://www.energy.gov/eere/water/water-power-funding-opportunities.* Each application will be reviewed based on the Guidance. The Guidance changes were minor and involved edits to clarify the incentive period examples and to add a fourth incentive period example in Section V.

DOE notes that applicants that received incentive payments for prior calendar years must submit a full application addressing all eligibility requirements for hydroelectricity generated and sold in calendar year 2019. DOE will not consider previously submitted application materials. Applications that refer to previous application materials or statements in lieu of submitting current information will not be considered. As authorized under Section 242 of EPAct 2005, and as explained in the Guidance, DOE also notes that it will only accept applications from qualified hydroelectric facilities that began operations at an existing dam or conduit during the inclusive period beginning October 1, 2005, and ending on September 30, 2015. Therefore, although DOE is accepting applications for full calendar year 2019 production, the qualified hydroelectric facility must have begun operations starting October 1, 2005, through September 30, 2015, for DOE to consider the application.

When submitting information to DOE for Section 242 program, it is recommended that applicants carefully read and review the completed content of the Guidance for this process. When reviewing applications, DOE may corroborate the information provided with information that DOE finds through FERC e-filings, contact with power off-taker, and other due diligence measure carried out by reviewing officials. DOE may require the applicant to conduct and submit an independent audit at its own expense, or DOE may

conduct an audit to verify the number of kilowatt-hours claimed to have been generated and sold by the qualified hydroelectric facility and for which an incentive payment has been requested or made.

Signing Authority

This document of the Department of Energy was signed on May 5, 2020, by David Solan, Deputy Assistant Secretary for Renewable Power, Office of Energy Efficiency and Renewable Energy, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE **Federal Register** Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the **Federal Register**.

Signed in Washington, DC on May 7, 2020.

Treena V. Garrett,

Federal Register Liaison Officer, U.S. Department of Energy.

[FR Doc. 2020–10149 Filed 5–11–20; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 2368–059]

Algonquin Northern Maine Generating Company; Notice of Application Accepted for Filing, Soliciting Motions To Intervene and Protests, Ready for Environmental Analysis, and Soliciting Comments, Recommendations, Preliminary Terms and Conditions, and Preliminary Fishway Prescriptions

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection.

a. *Type of Application:* Subsequent Minor License.

b. *Project No.:* 2368–059.

c. *Date Filed:* December 3, 2019.

d. *Applicant:* Algonquin Northern Maine Generating Company (Algonquin).

e. *Name of Project:* Scopan Hydroelectric Project.

f. *Location:* The existing project is located on Scopan Stream in the Town of Masardis in Aroostook County, Maine. No federal lands are occupied by the project works or located within the project boundary.

g. *Filed Pursuant to:* Federal Power Act 16 U.S.C. 791 (a)–825(r).

h. *Applicant Contact:* Ian MacRobbie, Vice President, Operations, Algonquin Northern Maine Generating Company, 26 Canal Bank, Windsor Locks, Connecticut 06096; Telephone (905) 465–6119.

i. *FERC Contact:* John Baummer, (202) 502–6837 or *john.baummer@ferc.gov.*

j. *Deadline for filing motions to intervene and protests, comments, recommendations, preliminary terms and conditions, and preliminary fishway prescriptions:* 60 days from the issuance date of this notice; reply comments are due 105 days from the issuance date of this notice.

The Commission strongly encourages electronic filing. Please file motions to intervene and protests, comments, recommendations, preliminary terms and conditions, and preliminary fishway prescriptions using the Commission's eFiling system at *http://www.ferc.gov/docs-filing/efiling.asp.* Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at *http://www.ferc.gov/docs-filing/ecomment.asp.* You must include your name and contact information at the end of your comments. For assistance, please contact the Federal Energy Regulatory Commission Online Support at *FERCOnlineSupport@ferc.gov,* (866) 208–3676 (toll free), or (202) 502–8659 (TTY).

The Commission's Rules of Practice require all intervenors filing documents with the Commission to serve a copy of that document on each person on the official service list for the project. Further, if an intervenor files comments or documents with the Commission relating to the merits of an issue that may affect the responsibilities of a particular resource agency, they must also serve a copy of the document on that resource agency.

k. This application has been accepted for filing and is now ready for environmental analysis.

l. *Project Description:* The existing Scopan Hydroelectric Project consists of: (1) A 750-foot-long dam that includes: (a) A 330-foot-long, 45-foot-high earthen embankment section (north embankment) with a 194-foot-long, 49-foot-high concrete retaining wall at the downstream end of the embankment; (b) a 24-foot-long, 45-foot-high concrete gravity spillway section with a crest elevation of 590 feet National Geodetic Vertical Datum of 1929 (NGVD) and a single 13.5-foot-high spillway gate with two 10-inch-diameter minimum flow butterfly valves; (c) a 26-foot-long, 48-foot-high concrete intake and powerhouse section that includes: (i) Two 12-inch-wide head gates and trashracks with 3-inch clear-bar spacing; and (ii) a 26-foot-long, 49-foot-high concrete powerhouse with a single 1.5-megawatt vertical propeller turbine-generator unit; and (d) a 370-foot-long, 45-foot-high earthen embankment section (south embankment) with a 135.5-foot-long, 45-foot-high concrete retaining wall at the downstream end of the embankment; (2) an approximately 15-mile-long, 5,000-acre impoundment (Scopan Lake) with a useable storage volume of 57,920 acre-feet between elevations 590.5 and 603.2 feet NGVD; (3) three 13.45/2.4-kilovolt transformers and switch gear that connect the generator to Emera, Maine's regional transmission line; and (4) appurtenant facilities.

Algonquin operates the project in a store and release mode in which the impoundment is drawdown from January through March of each year to meet electricity demand in the winter. During the spring and summer, the impoundment is maintained at or near the full pond levels to protect and enhance fisheries, wetlands, wildlife and recreational resources. Algonquin manages the project to augment flows in the Aroostook River downstream of the project for generation at the Aroostook River Project No. 2367 and the Tinker Falls Project, the latter of which is located in New Brunswick Canada and is not a FERC-licensed project. The Scopan Project had an average annual generation of approximately 878,913 kilowatt-hours from 2012 through 2018.

The project's current license requires Algonquin to: (1) Maintain Scopan Lake water levels as follows: (a) From May 15 to July 31, fluctuate Scopan Lake by no more than one foot; (b) from July 16 to Labor Day, target the elevation of Scopan Lake between 601.0 to 603.0 feet NGVD; and (c) from October 1 to November 15, maintain the elevation of Scopan Lake at or above 601.0 feet NGVD; (2) release minimum flows of 21 cubic feet per second (cfs) from December 1 through May 15, and 25 cfs from May 16 through November 30; (3) close one of the two minimum flow valves if Scopan Lake falls below 601.5 feet NGVD; (4) close both minimum flow valves if Scopan Lake falls below 601 feet NGVD; and (5) limit the maximum discharge from the project to not more than 600 cfs from April 1 to November 30.

Algonquin proposes to: (1) Maintain Scopan Lake water surface elevations as follows: (a) From June 1 to July 31 limit water level fluctuations in Scopan Lake

to no more than 0.5 vertical foot upward or 1.0 vertical foot downward within any 28-day period from June 1 through July 31; (b) from August 1 through Labor Day, maintain the water elevation of Scopan Lake between 601.0 and 603.0 feet NGVD; (c) from October 1 through November 15, maintain the water elevation of Scopan Lake above 601.0 feet NGVD; (d) limit winter drawdowns of Scopan Lake to no lower than 595.3 feet NGVD from November 16 to May 14; (2) limit the maximum discharge from the project to not more than 600 cfs from June 1 to November 30; and (3) continue to release a continuous minimum flow of 21 cfs including leakage from the minimum flow valves unless water levels in Scopan Lake fall below 601.5 feet NGVD from May 16 through November 30, in which case one valve would be closed.

m. In addition to publishing the full text of this notice in the **Federal Register**, the Commission provides all interested persons an opportunity to view and/or print the contents of this notice, as well as other documents in the proceeding (*e.g.,* license application) 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 (P–2368). 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 FERC at *FERCOnlineSupport@ferc.gov* or call toll-free, (886) 208–3673 or (202) 502–8659 (TTY).

You may also register online at *http://www.ferc.gov/docs-filing/esubscription.asp* to be notified via email of new filings and issuances related to this or other pending projects. For assistance, contact FERC Online Support.

n. Anyone may submit comments, a protest, or a motion to intervene in accordance with the requirements of Rules of Practice and Procedure, 18 CFR 385.210, .211, and .214. In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a motion to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.

All filings must: (1) Bear in all capital letters the title PROTEST, MOTION TO INTERVENE, COMMENTS, REPLY COMMENTS, RECOMMENDATIONS, PRELIMINARY TERMS AND CONDITIONS, or PRELIMINARY FISHWAY PRESCRIPTIONS; (2) set forth in the heading the name of the applicant and the project number of the application to which the filing responds; (3) furnish the name, address, and telephone number of the person protesting or intervening; and (4) otherwise comply with the requirements of 18 CFR 385.2001 through 385.2005. All comments, recommendations, terms and conditions, or prescriptions must set forth their evidentiary basis and otherwise comply with the requirements of 18 CFR 4.34(b). Agencies may obtain copies of the application directly from the applicant. A copy of any protest or motion to intervene must be served upon each representative of the applicant specified in the particular application. A copy of all other filings in reference to this application must be accompanied by proof of service on all persons listed in the service list prepared by the Commission in this proceeding, in accordance with 18 CFR 4.34(b) and 385.2010.

o. *Procedural Schedule:* The application will be processed according to the following schedule. Revisions to the schedule will be made as appropriate.

Milestone	Target date
Filing of interventions, protests, comments, recommendations, preliminary terms and conditions, and preliminary fishway prescriptions	July 2020
Commission issues Environmental Assessment	January 2021
Comments on Environmental Assessment	February 2021
Modified terms and conditions	April 2021

p. Final amendments to the application must be filed with the Commission no later than 30 days from the issuance date of this notice.

q. A license applicant must file no later than 60 days following the date of issuance of the notice of acceptance and ready for environmental analysis provided for in 18 CFR 5.22: (1) A copy of the water quality certification; (2) a copy of the request for certification, including proof of the date on which the certifying agency received the request; or (3) evidence of waiver of water quality certification.

Dated: May 6, 2020.

Kimberly D. Bose,

Secretary.

[FR Doc. 2020–10105 Filed 5–11–20; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 2105–089; 2105–126]

Pacific Gas and Electric Company; Notice of Petition for Declaratory Order

Take notice that on April 24, 2020, Pacific Gas and Electric Company (PG&E), applicant for relicensing the Upper North Fork Feather River Hydroelectric Project No. 2105, filed a petition for declaratory order (petition) pursuant to Rule 207(a)(2) of the Federal Energy Regulatory Commission's Rules of Practice and Procedure, 18 CFR 385.207(a)(2). PG&E requests that the Commission declare that the California State Water Resources Control Board has waived its authority to issue a certification for the Upper North Fork Feather River Project under Section 401 of the Clean Water Act, 33 U.S.C. 1341(a)(1), as more fully explained in the petition.

Any person wishing to comment on PG&E's petition may do so.[1] The deadline for filing comments is 30 days from the issuance of this notice. The Commission encourages electronic submission of comments in lieu of paper using the eFiling link at *http://www.ferc.gov.* Persons unable to file electronically should send comments to the following address: 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. Be sure to reference the project docket numbers (P–2105–089 and –126) with your submission.

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

[1] PG&E's request is part of its relicensing proceeding in Project No. 2105–089. Thus, any person that intervened in the relicensing proceeding is already a party. The filing of the petition in this case does not trigger a new opportunity to intervene.

last three digits in the docket number field to access the document. At this time, the Commission has suspended access to 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 FERC at *FERCOnline Support@ferc.gov* or call toll-free, (886) 208–3676 or TYY, (202) 502–8659.

Comment Date: 5:00 p.m. Eastern Time on June 5, 2020.

Dated: May 6, 2020.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2020–10119 Filed 5–11–20; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

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

Docket Numbers: ER20–838–002.
Applicants: Duke Energy Ohio, Inc.
Description: Tariff Amendment: DEO–AEP Amendment to Amended IA (PJM SA No. 1491) Request for Extension to be effective 12/21/2019.
Filed Date: 5/6/20.
Accession Number: 20200506–5054
Comments Due: 5 p.m. ET 5/27/20.

Docket Numbers: ER20–1498–000.
Applicants: Krayn Wind LLC.
Description: Supplement to April 3, 2020 Notice of Cancellation of Market-Based Rate Tariff (Transmittal Letter) of Krayn Wind, LLC.
Filed Date: 5/5/20.
Accession Number: 20200505–5216
Comments Due: 5 p.m. ET 5/26/20.

Docket Numbers: ER20–1769–000
Applicants: Chicot Solar, LLC.
Description: Baseline eTariff Filing: Chicot Solar, LLC Application for MBR Authority to be effective 7/5/2020.
Filed Date: 5/5/20.
Accession Number: 20200505–5189.
Comments Due: 5 p.m. ET 5/26/20.

Docket Numbers: ER20–1770–000.
Applicants: Carolina Power Partners, LLC.
Description: § 205(d) Rate Filing: Carolina Power Partners, LLC—Notice of Succession due to Name Change to be effective 4/6/2020.
Filed Date: 5/5/20.
Accession Number: 20200505–5192.
Comments Due: 5 p.m. ET 5/26/20.

Docket Numbers: ER20–1771–000.
Applicants: Midcontinent Independent System Operator, Inc.
Description: § 205(d) Rate Filing: 2020–05–06_SA 3487 ATC-Badger State Solar GIA (J818) to be effective 4/22/2020.
Filed Date: 5/6/20.
Accession Number: 20200506–5022.
Comments Due: 5 p.m. ET 5/27/20.

Docket Numbers: ER20–1772–000.
Applicants: Midcontinent Independent System Operator, Inc., Ameren Illinois Company.
Description: § 205(d) Rate Filing: 2020–05–06_SA 3028 Ameren IL-Prairie Power Project#27 Turris to be effective 7/6/2020.
Filed Date: 5/6/20.
Accession Number: 20200506–5025.
Comments Due: 5 p.m. ET 5/27/20.

Docket Numbers: ER20–1773–000.
Applicants: Midcontinent Independent System Operator, Inc.
Description: § 205(d) Rate Filing: 2020–05–06_SA 3323 Prairie State Solar-Ameren Illinois 1st Rev GIA (J808) to be effective 4/21/2020.
Filed Date: 5/6/20.
Accession Number: 20200506–5038.
Comments Due: 5 p.m. ET 5/27/20.

Docket Numbers: ER20–1774–000.
Applicants: Midcontinent Independent System Operator, Inc.
Description: § 205(d) Rate Filing: 2020–05–06_SA 2928 ITCTransmission-Pegaus Wind 3rd Rev GIA (J301 J701) to be effective 4/21/2020.
Filed Date: 5/6/20.
Accession Number: 20200506–5045.
Comments Due: 5 p.m. ET 5/27/20.

Docket Numbers: ER20–1775–000.
Applicants: Tri-State Generation and Transmission Association, Inc.
Description: § 205(d) Rate Filing: Rate Schedule FERC No. 281 between Tri-State and United Power to be effective 5/7/2020.
Filed Date: 5/6/20.
Accession Number: 20200506–5052.
Comments Due: 5 p.m. ET 5/27/20.

Docket Numbers: ER20–1776–000.
Applicants: Yards Creek Energy, LLC.
Description: § 205(d) Rate Filing: Reactive Service Rate Schedule to be effective 12/31/9998.
Filed Date: 5/6/20.
Accession Number: 20200506–5193.
Comments Due: 5 p.m. ET 5/27/20.

The filings are accessible in the Commission's eLibrary system by clicking on the links or querying the docket number.

Any person desiring to intervene or protest in any of the above proceedings must file in accordance with Rules 211 and 214 of the Commission's Regulations (18 CFR 385.211 and 385.214) 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.

Dated: May 6, 2020.

Nathaniel J. Davis, Sr.,

Deputy Secretary.

[FR Doc. 2020–10118 Filed 5–11–20; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Project No. 2188–245]

NorthWestern Corporation; Notice of Application Accepted for Filing and Soliciting Comments, Motions To Intervene, and Protests

Take notice that the following hydroelectric application has been filed with the Commission and is available for public inspection:

a. *Application Type:* Non-Capacity Amendment to License.
b. *Project No:* 2188–245.
c. *Date Filed:* August 29, 2019, supplemented April 30, 2020.
d. *Applicant:* NorthWestern Corporation.
e. *Name of Project:* Missouri-Madison Hydroelectric Project.
f. *Location:* The project is located on the Madison and Missouri Rivers in Gallatin, Madison, Lewis and Clark, and Cascade counties, Montana.
g. *Filed Pursuant to:* Federal Power Act, 16 U.S.C. 791a–825r.
h. *Applicant Contact:* Mary Gail Sullivan, Director, Environmental and Lands, NorthWestern Corporation, 9 W Granite St., Butte, Montana 59701, 406–497–3382, *MaryGail.Sullivan@northwestern.com.*

John Tabaracci, Corporate Counsel, NorthWestern Corporation, 208 North Montana Avenue, Suite 205, Helena, Montana 59601, (406) 443–8983, *john.tabaracci@northwestern.com.*

i. *FERC Contact:* Jennifer Ambler, (202) 502–8586, *jennifer.ambler@ferc.gov.*
j. *Deadline for filing comments, motions to intervene, and protests:* June 5, 2020.

The Commission strongly encourages electronic filing. Please file comments,

motions to intervene, and protests using the Commission's eFiling system at *http://www.ferc.gov/docs-filing/efiling.asp.* Commenters can submit brief comments up to 6,000 characters, without prior registration, using the eComment system at *http://www.ferc.gov/docs-filing/ecomment.asp.* You must include your name and contact information at the end of your comments. For assistance, please contact FERC Online Support at *FERCOnlineSupport@ferc.gov,* (866) 208–3676 (toll free), or (202) 502–8659 (TTY). In lieu of electronic filing, please send a paper copy to: Secretary, 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. The first page of any filing should include docket number P–2188–245. Comments emailed to Commission staff are not considered part of the Commission record.

The Commission's Rules of Practice and Procedure require all intervenors filing documents with the Commission to serve a copy of that document on each person whose name appears on the official service list for the project. Further, if an intervenor files comments or documents with the Commission relating to the merits of an issue that may affect the responsibilities of a particular resource agency, they must also serve a copy of the document on that resource agency.

k. *Description of Request:* NorthWestern proposes to amend its license to operate, at its discretion and to support grid reliability, the Ryan Development of the Missouri-Madison Hydroelectric Project to provide baseload generation, short-term reserves, load following generation, and peaking by fluctuating the level of the Ryan Reservoir in coordination with the Cochrane and Morony Developments. The proposed change to project operations would result in up to one foot above (to 3,038 feet) and eight feet below (to 3,029 feet) the current full pool elevation of 3,037 feet.

l. *Locations of the Application:* 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://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.

m. Individuals desiring to be included on the Commission's mailing list should so indicate by writing to the Secretary of the Commission.

n. *Comments, Protests, or Motions to Intervene:* Anyone may submit comments, a protest, or a motion to intervene in accordance with the requirements of Rules of Practice and Procedure, 18 CFR 385.210, .211, .214, respectively. In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a motion to intervene in accordance with the Commission's Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.

o. *Filing and Service of Documents:* Any filing must (1) bear in all capital letters the title COMMENTS, PROTEST, or MOTION TO INTERVENE as applicable; (2) set forth in the heading the name of the applicant and the project number of the application to which the filing responds; (3) furnish the name, address, and telephone number of the person commenting, protesting or intervening; and (4) otherwise comply with the requirements of 18 CFR 385.2001 through 385.2005. All comments, motions to intervene, or protests must set forth their evidentiary basis. Any filing made by an intervenor must be accompanied by proof of service on all persons listed in the service list prepared by the Commission in this proceeding, in accordance with 18 CFR 385.2010.

Dated: May 6, 2020.

Kimberly D. Bose,

Secretary.

[FR Doc. 2020–10106 Filed 5–11–20; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPPT–2020–0077; FRL–10008–64]

Certain New Chemicals; Receipt and Status Information for March 2020

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 03/01/2020 to 03/31/2020.

DATES: Comments identified by the specific case number provided in this document must be received on or before June 11, 2020.

ADDRESSES: Submit your comments, identified by docket identification (ID) number EPA–HQ–OPPT–2020–0077, and the specific case number for the chemical substance related to your comment, by one of the following methods:

- *Federal eRulemaking Portal: http://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.
- *Mail:* Document Control Office (7407M), Office of Pollution Prevention and Toxics (OPPT), Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460–0001.
- *Hand Delivery:* To make special arrangements for hand delivery or delivery of boxed information, please follow the instructions at *http://www.epa.gov/dockets/contacts.html.* Additional instructions on commenting

or visiting the docket, along with more information about dockets generally, is available at *http://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT: *For technical information contact:* Jim Rahai, Information Management Division (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 03/01/2020 to 03/31/2020. 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: *http://www.epa.gov/oppt/newchems.*

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 *http://www.epa.gov/dockets/comments.html.*

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 03/01/2020 TO 03/31/2020

Case no.	Version	Received date	Manufacturer	Use	Chemical substance
P–17–0110A	4	03/12/2020	DIC International (USA) LLC.	(G) Masking Photopolymer	(G) Phenol formaldehyde glycidyl ether acrylate cycloalkene ester.
P–17–0233A	4	03/09/2020	CBI	(S) Creping Aid for Yankee Dryers to manufacture tissue and towel paper.	(G) Oxyalkylene modified polyalkyl amine alkyl diacid polymer with 2-(chloromethyl)oxirane.
P–17–0414A	6	03/05/2020	CBI	(G) Monitor well performance	(G) Halogenated benzoic acid.
P–18–0059A	2	03/10/2020	Eastman Chemical Company, Inc.	(S) Chemical intermediate	(S) Butanoic acid, 4-(dimethylamino)-, ethyl ester.
P–18–0060A	5	03/10/2020	Eastman Chemical Company, Inc.	(S) Surfactant for Liquid Dish, Liquid Laundry, and Industrial Hand Wash; Export only volume of the TSCA manufactured NCS; and FDA related uses.	(S) 1-Butanaminium, 4-amino-N-(2-hydroxy-3-sulfopropyl)-N, N-dimethyl-4-oxo-, N-coco alkyl derivs., inner salts.
P–18–0069A	3	03/09/2020	Sasol Chemicals (USA) LLC.	(G) Polymer performance additive	(G) Surface modified boehmite.
P–18–0143A	7	03/03/2020	Huntsman International LLC.	(G) Anti-corrosive primer for outdoor industrial applications.	(G) Fatty acids, tall-oil polymers with aminoalkyl, dialkyl alkane diamine, polyalkylene polyamine alkanepolyamine fraction, and tris-[(alkylamino) alkyl] phenol.
P–18–0144A	6	03/03/2020	CBI	(G) Anti-corrosive primer for outdoor industrial applications.	(G)Formaldehyde, polymer with an alkane diamine and phenol.
P–18–0152A	6	03/06/2020	CBI	(G) Intermediate for use in manufacturing.	(G) Hydrolyzed Functionalized Diamino Silanol Polymer.
P–18–0152A	7	03/06/2020	CBI	(G) Intermediate for use in manufacturing.	(G) Hydrolyzed Functionalized Diamino Silanol Polymer.
P–18–0152A	8	03/11/2020	CBI	(G) Intermediate for use in manufacturing.	(G) Hydrolyzed Functionalized Diamino Silanol Polymer.
P–18–0237A	9	02/28/2020	CBI	(G) Use in print resins	(G) Alkanediol, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, alkylaminoalkyl methacrylate-, and dialkylheteromonocycle-blocked.
P–18–0292A	6	02/28/2020	CBI	(G) Use in print resins	(G) alkanediol, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane, alkylaminoalkylmethacrylate-blocked.
P–18–0323A	7	03/02/2020	Kuraray America, Inc.	(G) Raw material for polymer manufacturing.	(S) 2-Propenoic acid, 2-methyl-, 3-methyl-3-buten-1-yl ester.
P–18–0326A	7	03/04/2020	CBI	(G) Chemical Intermediate	(G) Alkanoic acid, alkyl ester, manuf. of, byproducts from, distn. residues.
P–18–0330A	2	03/04/2020	CBI	(G) Initiator	(G) Formaldehyde, polymer with alkyl aryl ketone.
P–18–0376A	4	03/11/2020	Sumitomo Chemical Advanced Technologies LLC.	(S) Substance used to improve physical properties in rubber products.	(G) Thiosulfuric acid, aminoalkyl ester.
P–18–0405A	4	03/05/2020	CBI	(G) Adhesive	(S) Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 3,6,9,12-tetraoxatetradeca-1,13-diene, glycidyl ether.
P–19–0036A	3	03/11/2020	Ethox Chemicals, LLC.	(S) As an additive to polymers for improvement in gas barrier performance.	(S) 1,4-Benzenedicarboxylic acid, 1,4-bis(2-phenoxyethyl) ester.

TABLE I—PMN/SNUN/MCANS APPROVED * FROM 03/01/2020 TO 03/31/2020—Continued

Case no.	Version	Received date	Manufacturer	Use	Chemical substance
P–19–0036A	4	03/16/2020	Ethox Chemicals, LLC.	(S) As an additive to polymers for improvement in gas barrier performance.	(S)1,4-Benzenedicarboxylic acid, 1,4-bis(2-phenoxyethyl) ester.
P–19–0077A	11	03/13/2020	CBI	(G) Agricultural	(G) Alkenylamide.
P–19–0116	4	03/24/2020	CBI	(S) Silk protein for production of fiber, and Skincare use as additive in dermal moisturizing lotions.	(G)Sr-(WaspSpider Polypeptide-1 Oligopeptide-178).
P–19–0138A	3	03/13/2020	CBI	(G) Intermediate	(G) Perfluorodioxaalkanoyl fluoride.
P–19–0139A	2	03/13/2020	CBI	(G) Intermediate	(G) Perfluoro-2-methyltrioxaalkanoyl fluoride.
P–19–0140A	3	03/13/2020	CBI	(G) Intermediate	(G)Perfluorodioxaalkyl vinyl ether.
P–19–0160A	2	03/04/2020	CBI	(S) Component of a UV curable printing ink.	(G) Alkanesulfonic acid, 2-[(2-aminoethyl)heteroatom-substituted]-, sodium salt (1:1), polymer with alpha-[2,2-bis(hydroxymethyl)butyl]-omega-methoxypoly(oxy-1,2-ethanediyl) and 1,1'-methylenebis[4-isocyanatocyclohexane], acrylic acid-dipenthaerythritol reaction products- and polypropylene glycol ether with pentaerythritol (4:1) triacrylate-blocked.
P–19–0161A	2	03/12/2020	CBI	(S) Organic amine salt mixture used as a foaming agent in the production of urethanes.	(G) Alkano1 amine salt mixture.
P–19–0174A	4	03/11/2020	International Lubricants, Inc.	(G) Phosphorus antiwear compound	(G) Octadecanoic acid, (alkylphosphinyl), polyol ester.
P–20–0005A	4	03/05/2020	RMC Advanced Technologies, Inc.	(G) Additive for plastics and resins	(G) modified graphene.
P–20–0010A	5	03/10/2020	CBI	(G) Polymerization auxiliary	(G) Carboxylic acid, reaction products with metalhydroxide, inorganic dioxide and metal.
P–20–0011A	5	03/04/2020	CBI	(G) Light stabilizer	(G) Tetraoxaspiro[5.5]alkyl-3,9-diylbis(alkyl-2,1-diyl) bis(2-cyano-3-(3,4-dimethoxyphenyl)acrylate).
P–20–0022A	3	03/05/2020	CBI	(G) Fuel additive for combustion improver.	(G) Polyalkoxycarbopolycycle hydroxy.
P–20–0030A	2	03/13/2020	CBI	(S) Plasticizer for plastisols and in caulks and sealants.	(G) Hexanedioic acid, alkyl ester.
P–20–0051A	3	03/11/2020	CBI	(S) Curing agent for Industrial epoxy coating systems.	(S) 1,8-Octanediamine, 4-(aminomethyl)-, N-benzyl derivs.
P–20–0061	1	03/03/2020	Allnex USA, Inc	(S) Coating resin crosslinking agent	(G) Formaldehyde, polymer with alkylphenols, alkyl ether.
P–20–0062	1	03/05/2020	Inabata America Corporation.	(S) Use as an electrically conductive material, as an additive in field emission applications, as an additive in batteries, energy storage, and electrode applications, as an additive to improve physical or mechanical properties, as an additive for weight reduction, and as a heat generation material.	(S) Multi-walled carbon nanotubes; closed; 4.4–12.8 nm diameter; bundle length 10.6–211.1 um; Grade: Jenotube 6 (Substance-1).
P–20–0063	1	03/05/2020	Inabata America Corporation.	(S) Use as an electrically conductive material, as an additive in field emission applications as an additive in batteries, energy storage, and electrode applications, as an additive to improve physical or mechanical properties, as an additive for weight reduction, as a heat generation material, and as a heat dissipation material.	(S) Multi-walled carbon nanotubes; closed; 5.1–11.6 nm diameter; bundle length 1.9–552.0 um; Grade: Jenotube 8 (Substance-2).

TABLE I—PMN/SNUN/MCANS APPROVED * FROM 03/01/2020 TO 03/31/2020—Continued

Case no.	Version	Received date	Manufacturer	Use	Chemical substance
P–20–0064	1	03/05/2020	Inabata America Corporation.	(S) Use as an electrically conductive material, as an additive in field emission applications, as an additive in batteries, energy storage, and electrode applications, as an additive to improve physical or mechanical properties, as an additive for weight reduction, as a heat generation material, and as a heat dissipation material.	(S) Multi-walled carbon nanotubes; closed; 7.9–14.2 nm diameter; bundle length 9.4–106.4 um; Grade: Jenotube 10 (Substance-3).
P–20–0065	1	03/05/2020	Inabata America Corporation.	(S) Use as an electrically conductive material, as an additive in field emission applications, as an additive in batteries, energy storage, and electrode applications, as an additive to improve physical or mechanical properties, as an additive for weight reduction, as a heat generation material, and as a heat dissipation material.	(S) Multi-walled carbon nanotubes; closed; 17.0–34.7 nm diameters; globular shape; Grade: Jenotube 20 (Substance-4).
P–20–0066	1	03/09/2020	CBI	(G) Antiwear additive for lubricants	(G) 2-Propenoic acid, 2-hydroxyethyl ester, reaction products with dialkyl hydrogen heterosubstituted phosphate and dimethyl phosphonate.
P–20–0067	1	03/11/2020	Shepherd Chemical ..	(G) Catalyst and Additive	(S) Neodecanoic acid, zinc salt, basic.
P–20–0068	1	03/11/2020	CBI	(G) Perfume	(S) 1,3-Propanediol, 2,2-dimethyl-, 1,3-diacetate.
P–20–0069	2	03/21/2020	CBI	(G) Surface-active chemical	(G) 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl 2-methyl-2-propenoate phosphate and 2-propenoic acid salt, peroxydisulfuric acid ([(HO)S(O)2]2O2) sodium salt (1:2)- and sodium (disulfite) (2:1)-initiated.
P–20–0070	1	03/16/2020	Clariant Corporation	(S) Solvent for use in formulated pesticide products, and in agrochemical adjuvant formulations.	(S) Nonanamide, N,N-dimethyl-.
P–20–0072	1	03/18/2020	CBI	(G) Additive used to impart specific physicochemical properties to finished articles.	(G) Multi-walled carbon nanotubes.
P–20–0074	1	03/23/2020	Clariant Corporation	(S) Surfactant for use in the formulation of pesticide products.	(S) Oxirane, 2-methyl-, polymer with oxirane, monoundecyl ether, branched and linear.
P–20–0075	1	03/24/2020	CBI	(G) Pigment dispersant	(G) Phenol, 4,4'-(1-alkylalkylidene)bis-, polymer with 2-(2-aminoalkoxy)alcohol,2-(chloroalkyl)oxirane, N1,N1-dialkyl-1,3-alkanediamine and .alpha-hydro-.omega.-hydroxypoly[oxy(alkyl-1,2-alkanediyl)], branched 4-alkylphenyl ethers,acetates (salts).
P–20–0076	1	03/25/2020	Cytec Industries, Inc	(G) Mining chemical	(S) Glycine, reaction products with sodium O-iso-Pr carbonodithioate,sodium salts.
SN–19–0006A ..	3	03/05/2020	CBI	(G) Component for 3D Printing formulations.	(S) 2-Propen-1-one, 1-(4-morpholinyl)-.

* The term 'Approved' indicates that a submission has passed a quick initial screen ensuring all required information and documents have been provided with the submission prior to the start of the 90 day review period, and in no way reflects the final status of a complete submission review.

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 03/01/2020 TO 03/31/2020

Case No.	Received date	Commencement date	If amendment, type of amendment	Chemical substance
P–13–0123	03/20/2020	03/16/2020	N	(G) Salt of acidic polymers with monomeric and polymeric bases.
P–15–0054A ..	03/03/2020	09/30/2015	Withdrew CBI claim ..	(S) Carbon nanotubes (70% single walled and 30% multi-walled (double- or triple-walled) carbon nanotubes.
P–17–0184	03/06/2020	02/11/2020	N	(S) 1-Propanaminium, 2-hydroxy-N,N-dimethyl-N-[3-[(1-oxooctyl)amino]propyl]-3-sulfo-, inner salt.
P–17–0325	03/05/2020	03/05/2020	N	(S) 2-Propenoic Acid, polymer with 2-methyl-2-((1-oxo-2propenyl)amino)-1-propanesulfonic acid.
P–17–0414A ..	03/09/2020	12/31/2019	Withdrew CBI claim ..	(S) Benzoic acid, 2,3,5 -trilfuoro.
P–17–0450A ..	03/09/2020	12/31/2019	Withdrew CBI claim ..	(S) Benzoic acid, 2,3,4-trichloro-.
P–18–0016	03/13/2020	02/24/2020	N	(G) Aromatic sulfonium tricyclo fluoroalkyl sulfonic acid salt.
P–18–0172	03/04/2020	11/06/2019	Withdrew CBI claim ..	(S) Calcium, carbonate 2-ethylhexanoate neodecanoate propionate complex.
P–19–0059	03/02/2020	02/06/2020	N	(S) Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-1-propen-1-yl)oxy]ethyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 1,1′-[(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)]] di-2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, ammonium salt.
P–19–0099	03/02/2020	02/26/2020	N	(S) Propanoic acid, 3-hydroxy-2-(hydroxymethyl)-2-methyl-, polymer with dimethyl carbonate, 1,2-ethanediamine, 2- ethyl-2-(hydroxymethyl)-1,3-propanediol, 1,6-hexanediol and 1,1′-methylenebis[4-isocyanatocyclohexane], compd. with n,n-diethylethanamine.

* The term 'Approved' indicates that a submission has passed a quick initial screen ensuring all required information and documents have been provided with the submission.

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 test information submitted, and chemical substance identity.

TABLE III—TEST INFORMATION RECEIVED FROM 03/01/2020 TO 03/31/2020

Case No.	Received date	Type of test information	Chemical substance
P–14–0627	03/11/2020	Oral (Gavage) Prenatal Developmental Toxicity Study of n-Butyl Pyrrolidone in New Zealand White Rabbits (OECD Test Guideline 414).	(G) Cyclic amide.
P–14–0627	03/04/2020	Draft: Oral (Gavage) Prenatal Developmental Toxicity Study of n-Butyl Pyrrolidone in New Zealand White Rabbits (OECD Test Guideline 414).	(G) Cyclic amide.
P–16–0404	03/09/2020	Acute Toxicity to the Zebra Fish, Determined Under Static-Renewal Test Conditions (OCSPP Test Guideline 850.1075).	(G) Alkyl ester, 2-({4-[2-(trisubstituted phenyl)azo]-5-acetamido-2-substitutedphenyl} (substituted alkoxy)amino).
P–16–0543	02/28/2020	Exposure Monitoring Report	(G) Halogenophosphoric acid metal salt.
P–18–0303	03/11/2020	Revised Aquatic Toxicity Acute Base set (OECD Test Guideline 201, 202, 203).	(G) 2-propenoic acid, polymer with aliphatic cyclic epoxide.

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 21, 2020.

Pamela Myrick,

Director, Information Management Division, Office of Pollution Prevention and Toxics.

[FR Doc. 2020–10101 Filed 5–11–20; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[See the Item Specific Docket Numbers Provided in the Text; FRL–10008–53–OECA]

Proposed Information Collection Requests; Comment Requests

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency is planning to submit the below

listed information collection requests (ICR) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act (PRA). Before doing so, EPA is soliciting public comments on specific aspects of the proposed information collections as described below. These are proposed extensions of 24 currently approved ICRs. 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.

DATES: Comments must be submitted on or before July 13, 2020.

ADDRESSES: Submit your comments, referencing the Docket ID numbers provided for each item in the text below, online using *www.regulations.gov* (our preferred method), by email to *docket.oeca@epa.gov,* or by mail to: EPA Docket Center, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

EPA's policy is that all comments received will be included in the public docket without change including any personal information provided, unless the comment includes profanity, threats, information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

FOR FURTHER INFORMATION CONTACT: Patrick Yellin, Monitoring, Assistance, and Media Programs Division, Office of Compliance, (Mailcode 2227A), Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460; telephone number: (202) 564–2970; fax number: (202) 564–0050; email address: *yellin.patrick@epa.gov.*

SUPPLEMENTARY INFORMATION: Supporting documents which explain in detail the information that the EPA will be collecting are available in the public docket for this ICR. The docket can be viewed online at *www.regulations.gov* or in person at the EPA Docket Center, WJC West, Room 3334, 1301 Constitution Ave. NW, Washington, DC. The telephone number for the Docket Center is 202–566–1744. For additional information about EPA's public docket, visit *http://www.epa.gov/dockets.*

Pursuant to section 3506(c)(2)(A) of the PRA, EPA is soliciting comments and information to enable it to: (i) 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; (ii) 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; (iii) enhance the quality, utility, and clarity of the information to be collected; and (iv) 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. Burden is defined at 5 CFR 1320.03(b). EPA will consider the comments received and amend the ICR as appropriate. The final ICR package will then be submitted to OMB for review and approval. At that time, EPA will issue another **Federal Register** document to announce the submission of the ICR to OMB and the opportunity to submit additional comments to OMB.

General abstract: For all the listed ICRs in this document, owners and operators of affected facilities are required to comply with reporting and record keeping requirements for the general provisions of 40 CFR part 60, subpart A, 40 CFR part 63, subpart A, 40 CFR part 264, subpart A, or 40 CFR part 265, subpart A, as well as the applicable specific standards. This includes submitting initial notifications, performance tests and periodic reports and results, and maintaining records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, or any period during which the monitoring system is inoperative. These reports are used by EPA to determine compliance with the standards.

(1) *Docket ID Number:* EPA–HQ–OECA–2013–0346; NESHAP for Acrylic/Modacrylic Fibers Production, Carbon Black Production, Chemical Manufacturing: Chromium Compounds, Flexible Polyurethane Foam Production/Fabrication, Lead Acid Battery Manufacturing, and Wood Preserving (40 CFR part 63, subparts LLLLLL, MMMMMM, NNNNNN, OOOOOO, PPPPPP, and QQQQQQ) (Renewal); EPA ICR Number 2256.06; OMB Control Number 2060–0598; Expiration date December 31, 2020.

Respondents: Acrylic or modacrylic fibers production plants; carbon black production plants, facilities that use chromite ore as the basic feedstock to manufacture chromium compounds, primarily sodium dichromate, chromic acid, and chromic oxide; flexible polyurethane foam manufacturing facilities, lead acid battery manufacturing facilities, and wood preserving facilities located at area sources of hazardous air pollutants (HAP).

Respondent's obligation to respond: Mandatory (40 CFR part 63, subparts LLLLLL, MMMMMM, NNNNNN, OOOOOO, PPPPPP, and QQQQQQ).

Estimated number of respondents: 956.

Frequency of response: Initially, occasionally, and semiannually.

Estimated annual burden: 6,342 hours.

Estimated annual cost: $654,000, includes $0 annualized capital or operation and maintenance (O&M) costs.

Changes in estimates: There is no change in burden from the previous ICR.

(2) *Docket ID Number:* EPA–HQ–OECA–2020–0212; NESHAP for Manufacturing of Nutritional Yeast (40 CFR part 63, subpart CCCC) (Renewal); EPA ICR Number 2568.03; OMB Control Number 2060–0719; Expiration date December 31, 2020.

Respondents: Nutritional yeast production facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart CCCC).

Estimated number of respondents: 4.

Frequency of response: Initially and semiannually.

Estimated annual burden: 1,371 hours.

Estimated annual cost: $807,914, includes $695,130 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(3) *Docket ID Number:* EPA–HQ–OECA–2013–0316; NSPS for Onshore Natural Gas Processing Plants (40 CFR part 60, subparts KKK and LLL) (Renewal); EPA ICR Number 1086.12; OMB Control Number 2060–0120; Expiration date January 31, 2021.

Respondents: Nutritional yeast production facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subparts KKK and LLL).

Estimated number of respondents: 484.

Frequency of response: Initially, semiannually, and occasionally.

Estimated annual burden: 101,800 hours.

Estimated annual cost: $10,780,000, includes $68,400 annualized capital or O&M costs.

Changes in estimates: There is a projected decrease in burden due to anticipated modifications at existing sources that would no longer meet the requirements of subparts KKKK or LLLL, but would become subject to 40 CFR part 60, subpart OOOO.

(4) *Docket ID Number:* EPA–HQ–OECA–2013–0333; Air Emission Standards for Tanks, Surface Impoundments and Containers (40 CFR part 264, subpart CC and 40 CFR part 265, subpart CC) (Renewal); EPA ICR Number 1593.11; OMB Control Number 2060–0318; Expiration date January 31, 2021.

Respondents: Treatment, storage, and disposal facilities (TSDFs) and large quantity generator (LQF) facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 264, subpart CC and 40 CFR part 265, subpart CC).

Estimated number of respondents: 6,209.

Frequency of response: Initially, semiannually, and occasionally.

Estimated annual burden: 712,000 hours.

Estimated annual cost: $85,900,000, includes $12,400,000 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(5) *Docket ID Number:* EPA–HQ–OECA–2020–0203; NSPS Review for Municipal Solid Waste Landfills (40 CFR part 60, subpart XXX) (Renewal); EPA ICR Number 2498.04; OMB Control Number 2060–0697; Expiration date January 31, 2021.

Respondents: Municipal solid waste landfills that commenced construction, modification, or reconstruction on or after May 30, 1991.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart XXX).

Estimated number of respondents: 133.

Frequency of response: Initially, occasionally, and semiannually.

Estimated annual burden: 91,087 hours.

Estimated annual cost: $6,130,000, includes $ 597,000 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(6) *Docket ID Number:* EPA–HQ–OECA–2013–0019; NSPS for Electric Utility Steam Generating Units (40 CFR part 60, subpart Da) (Renewal); EPA ICR Number 1053.13; OMB Control Number 2060–0023; Expiration date February 28, 2021.

Respondents: Electric utility steam generating facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart Da).

Estimated number of respondents: 743.

Frequency of response: Initially, quarterly, and semiannually.

Estimated annual burden: 177,000 hours.

Estimated annual cost: $31,900,000, includes $13,300,000 annualized capital or O&M costs.

Changes in estimates: There is a projected increase in burden due to an increase in the number of sources subject to the regulation.

(7) *Docket ID Number:* EPA–HQ–OECA–2013–0332; NSPS for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR part 60, subpart Dc) (Renewal); EPA ICR Number 1564.11; OMB Control Number 2060–0202; Expiration date February 28, 2021.

Respondents: Industrial-commercial-institutional steam generating units with maximum design heat input capacity of 29 megawatts (MW) or less, but greater than or equal to 2.9 MW.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart Dc).

Estimated number of respondents: 290.

Frequency of response: Initially and semiannually.

Estimated annual burden: 205,000 hours.

Estimated annual cost: $33,300,000, includes $11,800,000 annualized capital or O&M costs.

Changes in estimates: There is a projected increase in burden due to an increase in the number of sources subject to the regulation.

(8) *Docket ID Number:* EPA–HQ–OECA–2013–0351; NESHAP for Solvent Extraction for Vegetable Oil Production (40 CFR part 63, subpart GGGG) (Renewal); EPA ICR Number 1947.10; OMB Control Number 2060–0471; Expiration date February 28, 2021.

Respondents: Facilities with a vegetable oil production process.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart GGGG).

Estimated number of respondents: 89.

Frequency of response: Initially, occasionally, and semiannually.

Estimated annual burden: 33,400 hours.

Estimated annual cost: $3,510,000, includes $0 annualized capital or O&M costs.

Changes in estimates: There is a projected increase in burden due to an increase in the number of sources subject to the regulation.

(9) *Docket ID Number:* EPA–HQ–OECA–2013–0326; NSPS for Asphalt Processing and Roofing Manufacturing (40 CFR part 60, subpart UU) (Renewal); EPA ICR Number 0661.13; OMB Control Number 2060–0002; Expiration date February 28, 2021.

Respondents: Asphalt processing and roofing manufacturing facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart UU).

Estimated number of respondents: 144.

Frequency of response: Initially, occasionally, and semiannually.

Estimated annual burden: 34,100 hours.

Estimated annual cost: $8,820,000, includes $5,240,000 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(10) *Docket ID Number:* EPA–HQ–OECA–2020–0204; Emission Guidelines for Municipal Solid Waste Landfills (40 CFR part 60, subpart Cf) (Renewal); EPA ICR Number 2522.03; OMB Control Number 2060–0720; Expiration date February 28, 2021.

Respondents: Municipal solid waste (MSW) landfills that accepted waste since November 8, 1987 and commenced construction, reconstruction, or modification on or before July 17, 2014.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart Cf).

Estimated number of respondents: 1,192.

Frequency of response: Initially, occasionally, and semiannually.

Estimated annual burden: 679,668 hours.

Estimated annual cost: $41,800,000 includes $4,000,000 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(11) *Docket ID Number:* EPA–HQ–OECA–2013–0347; NESHAP for Epoxy Resin and Non-Nylon Polyamide Production (40 CFR part 63, subpart W) (Renewal); EPA ICR Number 1681.10; OMB Control Number 2060–0290; Expiration date April 30, 2021.

Respondents: Epoxy resin and non-nylon polyamide resin production facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart W).

Estimated number of respondents: 7.

Frequency of response: Initially, occasionally, quarterly, and semiannually.

Estimated annual burden: 3,940 hours.

Estimated annual cost: $424,000, includes $9,000 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(12) *Docket ID Number:* EPA–HQ–OECA–2014–0080; NESHAP for Cellulose Products Manufacturing (40 CFR part 63, subpart UUUU) (Renewal); EPA ICR Number 1974.09; OMB Control

Number 2060–0488; Expiration date April 30, 2021.

Respondents: Cellulose products manufacturing facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart UUUU).

Estimated number of respondents: 13.

Frequency of response: Initially and semiannually.

Estimated annual burden: 12,200 hours.

Estimated annual cost: $1,280,000, includes $1,010 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(13) *Docket ID Number:* EPA–HQ–OECA–2013–0324; NESHAP for Marine Tank Vessel Loading Operations (40 CFR part 63, subpart Y) (Renewal); EPA ICR Number 1679.11; OMB Control Number 2060–0289; Expiration date May 31, 2021.

Respondents: Marine tank vessels loading operations.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart Y).

Estimated number of respondents: 804.

Frequency of response: Initially, annually, and semiannually.

Estimated annual burden: 10,702 hours.

Estimated annual cost: $1,130,000, includes $0 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(14) *Docket ID Number:* EPA–HQ–OECA–2014–0056; NESHAP for Shipbuilding and Ship Repair Facilities—Surface Coating (40 CFR part 63, subpart II) (Renewal); EPA ICR Number 1712.11; OMB Control Number 2060–0330; Expiration date May 31, 2021.

Respondents: Shipbuilding and ship repair facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart II).

Estimated number of respondents: 56.

Frequency of response: Semiannually.

Estimated annual burden: 28,700 hours.

Estimated annual cost: $3,010,000, includes $0 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(15) *Docket ID Number:* EPA–HQ–OECA–2014–0028; NSPS for Calciners and Dryers in Mineral Industries (40 CFR part 60, subpart UUU) (Renewal); EPA ICR Number 0746.11; OMB Control Number 2060–0251; Expiration date May 31, 2021.

Respondents: Mineral processing plants with calciners or dryers.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart UUU).

Estimated number of respondents: 167.

Frequency of response: Initially, occasionally, and semiannually.

Estimated annual burden: 6,630 hours.

Estimated annual cost: $805,000, includes $109,000 annualized capital or O&M costs

Changes in estimates: There is no change in burden from the previous ICR.

(16) *Docket ID Number:* EPA–HQ–OECA–2013–0322; NESHAP for Beryllium Rocket Motor Firing (40 CFR part 61, subpart D) (Renewal); EPA ICR Number 1125.09; OMB Control Number 2060–0394; Expiration date July 31, 2021.

Respondents: Beryllium rocket motor fuel firing facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 61, subpart D).

Estimated number of respondents: 1.

Frequency of response: Initially and occasionally.

Estimated annual burden: 9 hours.

Estimated annual cost: $997, includes $0 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(17) *Docket ID Number:* EPA–HQ–OECA–2011–0234; NESHAP for Petroleum Refineries (40 CFR part 63, subpart CC) (Renewal); EPA ICR Number 1692.11; OMB Control Number 2060–0340; Expiration date July 31, 2021.

Respondents: Petroleum refining process units and emission points located at refineries that are major sources of HAP emissions.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart CC)

Estimated number of respondents: 142.

Frequency of response: Quarterly and semiannually.

Estimated annual burden: 99,722 hours.

Estimated annual cost: $47,200,000, includes $38,900,000 annualized capital or O&M costs.

Changes in estimates: There is a projected decrease in burden due to reduced capital costs following implementation of prior rule amendments.

(18) *Docket ID Number:* EPA–HQ–OECA–2013–0349; NESHAP for Pharmaceutical Production (40 CFR part 63, subpart GGG) (Renewal); EPA ICR Number 1781.09; OMB Control Number 2060–0358; Expiration date July 31, 2021.

Respondents: Pharmaceuticals manufacturing operations.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart GGG).

Estimated number of respondents: 27.

Frequency of response: Semiannually.

Estimated annual burden: 44,300 hours.

Estimated annual cost: $4,760,000, includes $112,000 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(19) *Docket ID Number:* EPA–HQ–OECA–2013–0327; NSPS for Portland Cement Plants (40 CFR part 60, subpart F) (Renewal); EPA ICR Number 1051.15; OMB Control Number 2060–0025; Expiration date August 31, 2021.

Respondents: Portland cement plants.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart F).

Estimated number of respondents: 95.

Frequency of response: Initially and semiannually.

Estimated annual burden: 14,500 hours.

Estimated annual cost: $2,290,000, includes $767,000 annualized capital or O&M costs.

Changes in estimates: There is a projected decrease in burden due to anticipated shutdown of existing sources.

(20) *Docket ID Number:* EPA–HQ–OECA–2014–0041; NSPS for Glass Manufacturing Plants (40 CFR part 60, subpart CC) (Renewal); EPA ICR Number 1131.13; OMB Control Number 2060–0054; Expiration date August 31, 2021.

Respondents: Glass manufacturing facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart CC).

Estimated number of respondents: 41.

Frequency of response: Initially and semiannually.

Estimated annual burden: 850 hours.

Estimated annual cost: $327,000, includes $238,000 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(21) *Docket ID Number:* EPA–HQ–OECA–2013–0348; NESHAP for Primary Aluminum Reduction Plants (40 CFR part 63, subpart LL) (Renewal); EPA ICR Number 1767.09; OMB Control Number 2060–0360; Expiration date August 31, 2021.

Respondents: Primary aluminum reduction plants.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart LL).

Estimated number of respondents: 16.

Frequency of response: Initially and semiannually.

Estimated annual burden: 71,900 hours.

Estimated annual cost: $7,920,000, includes $91,300 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(22) *Docket ID Number:* EPA–HQ–OECA–2013–0323; NESHAP for Area Sources: Electric Arc Furnace Steelmaking Facilities (40 CFR part 63, subpart YYYYY) (Renewal); EPA ICR Number 2277.06; OMB Control Number 2060–0608; Expiration date August 31, 2021.

Respondents: Electric Arc Furnace (EAF) Steelmaking facilities that are area sources of HAP emissions.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart YYYYY).

Estimated number of respondents: 91.

Frequency of response: Initially, occasionally, and semiannually.

Estimated annual burden: 4,450 hours.

Estimated annual cost: $467,000, includes $0 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(23) *Docket ID Number:* EPA–HQ–OECA–2014–0027; NSPS for Bulk Gasoline Terminals (40 CFR part 60, subpart XX) (Renewal); EPA ICR Number 0664.13; OMB Control Number 2060–0006; Expiration date September 30, 2021.

Respondents: Bulk gasoline terminal facilities.

Respondent's obligation to respond: Mandatory (40 CFR part 60, subpart XX).

Estimated number of respondents: 40.

Frequency of response: Initially.

Estimated annual burden: 13,200 hours.

Estimated annual cost: $1,390,000, includes $0 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

(24) *Docket ID Number:* EPA–HQ–OECA–2014–0099; NESHAP for Ferroalloys Production Area Sources (40 CFR part 63, subpart YYYYYY) (Renewal); EPA ICR Number 2303.06; OMB Control Number 2060–0625; Expiration date September 30, 2021.

Respondents: Ferroalloys production facilities that are area sources of HAP emissions.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart YYYYYY).

Estimated number of respondents: 10.

Frequency of response: Initially and annually.

Estimated annual burden: 391 hours.

Estimated annual cost: $41,100, includes $0 annualized capital or O&M costs.

Changes in estimates: There is no change in burden from the previous ICR.

Martha Segall,

Acting Director, Monitoring, Assistance and Media Programs Division, Office of Compliance.

[FR Doc. 2020–10097 Filed 5–11–20; 8:45 am]

BILLING CODE 6560–50–P

EXPORT-IMPORT BANK OF THE UNITED STATES

Sunshine Act Meeting; Notice of an Open Meeting of the Board of Directors of the Export-Import Bank of the United States

TIME AND DATE: Thursday, May 21, 2020 at 10:00 a.m.

PLACE: The meeting will be held via Teleconference.

STATUS: The meeting will be open to public observation by teleconference.

MATTER TO BE CONSIDERED:

- Item No. 1 Small Business Update.
- Item No. 2 Additionality and Economic Impact Reforms.

CONTACT PERSON FOR MORE INFORMATION: Members of the public who wish to attend the meeting should email Joyce Stone, Office of the General Counsel, 811 Vermont Avenue NW, Washington, DC 20571 (*joyce.stone@exim.gov*) by close of business Tuesday, May 19, 2020. Individuals will be given call-in information upon notice of attendance to EXIM.

Joyce Stone,

Assistant Corporate Secretary.

[FR Doc. 2020–10220 Filed 5–8–20; 11:15 am]

BILLING CODE 6690–01–P

FEDERAL TRADE COMMISSION

[File No. 191 0169]

AbbVie Inc. and Allergan plc; Analysis of Consent Order To Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Proposed consent agreement; request for comment.

SUMMARY: The consent agreement in this matter settles alleged violations of federal law prohibiting unfair methods of competition. The attached Analysis to Aid Public Comment describes both the allegations in the complaint and the terms of the consent order—embodied in the consent agreement—that would settle these allegations.

DATES: Comments must be received on or before June 11, 2020.

ADDRESSES: Interested parties may file comments online or on paper, by following the instructions in the Request for Comment part of the **SUPPLEMENTARY INFORMATION** section below. Please write: ''AbbVie and Allergan; File No. 191 0169'' on your comment, and file your comment online at *https://www.regulations.gov* by following the instructions on the web-based form. If you prefer to file your comment on paper, please mail your comment to the following address: Federal Trade Commission, Office of the Secretary, 600 Pennsylvania Avenue NW, Suite CC–5610 (Annex D), Washington, DC 20580; or deliver your comment to the following address: Federal Trade Commission, Office of the Secretary, Constitution Center, 400 7th Street SW, 5th Floor, Suite 5610 (Annex D), Washington, DC 20024.

FOR FURTHER INFORMATION CONTACT: Kari Wallace (202–326–3085), Bureau of Competition, Federal Trade Commission, 600 Pennsylvania Avenue NW, Washington, DC 20580.

SUPPLEMENTARY INFORMATION: Pursuant to Section 6(f) of the Federal Trade Commission Act, 15 U.S.C. 46(f), and FTC Rule 2.34, 16 CFR 2.34, notice is hereby given that the above-captioned consent agreement containing a consent order to cease and desist, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of thirty (30) days. The following Analysis of Agreement Containing Consent Orders to Aid Public Comment describes the terms of the consent agreement and the allegations in the complaint. An electronic copy of the full text of the consent agreement package can be obtained from the FTC website (for May 5, 2020), at this web address: *https://www.ftc.gov/news-events/commission-actions.*

You can file a comment online or on paper. For the Commission to consider your comment, we must receive it on or before June 11, 2020. Write ''AbbVie and Allergan; File No. 191 0169'' on your comment. Your comment—including your name and your state—will be placed on the public record of this proceeding, including, to the extent practicable, on the *https://www.regulations.gov* website.

Due to the public health emergency in response to the COVID–19 outbreak and the agency's heightened security screening, postal mail addressed to the Commission will be subject to delay. We strongly encourage you to submit your

comments online through the *https://www.regulations.gov* website.

If you prefer to file your comment on paper, write ''AbbVie and Allergan; File No. 191 0169'' on your comment and on the envelope, and mail your comment to the following address: Federal Trade Commission, Office of the Secretary, 600 Pennsylvania Avenue NW, Suite CC–5610 (Annex D), Washington, DC 20580; or deliver your comment to the following address: Federal Trade Commission, Office of the Secretary, Constitution Center, 400 7th Street SW, 5th Floor, Suite 5610 (Annex D), Washington, DC 20024. If possible, submit your paper comment to the Commission by courier or overnight service.

Because your comment will be placed on the publicly accessible website at *https://www.regulations.gov,* you are solely responsible for making sure that your comment does not include any sensitive or confidential information. In particular, your comment should not include any sensitive personal information, such as your or anyone else's Social Security number; date of birth; driver's license number or other state identification number, or foreign country equivalent; passport number; financial account number; or credit or debit card number. You are also solely responsible for making sure your comment does not include any sensitive health information, such as medical records or other individually identifiable health information. In addition, your comment should not include any ''trade secret or any commercial or financial information which . . . is privileged or confidential''—as provided by Section 6(f) of the FTC Act, 15 U.S.C. 46(f), and FTC Rule 4.10(a)(2), 16 CFR 4.10(a)(2)—including in particular competitively sensitive information such as costs, sales statistics, inventories, formulas, patterns, devices, manufacturing processes, or customer names.

Comments containing material for which confidential treatment is requested must be filed in paper form, must be clearly labeled ''Confidential,'' and must comply with FTC Rule 4.9(c). In particular, the written request for confidential treatment that accompanies the comment must include the factual and legal basis for the request, and must identify the specific portions of the comment to be withheld from the public record. *See* FTC Rule 4.9(c). Your comment will be kept confidential only if the General Counsel grants your request in accordance with the law and the public interest. Once your comment has been posted on the public FTC website—as legally required by FTC Rule 4.9(b)—we cannot redact or remove your comment from the FTC website, unless you submit a confidentiality request that meets the requirements for such treatment under FTC Rule 4.9(c), and the General Counsel grants that request.

Visit the FTC website at *http://www.ftc.gov* to read this Notice and the news release describing this matter. The FTC Act and other laws that the Commission administers permit the collection of public comments to consider and use in this proceeding, as appropriate. The Commission will consider all timely and responsive public comments that it receives on or before June 11, 2020. For information on the Commission's privacy policy, including routine uses permitted by the Privacy Act, see *https://www.ftc.gov/site-information/privacy-policy.*

Analysis of Consent Order To Aid Public Comment

I. Introduction

The Federal Trade Commission (''Commission'') has accepted, subject to final approval, an Agreement Containing Consent Orders (''Consent Agreement'') from AbbVie Inc. (''AbbVie'') and Allergan plc (''Allergan'') designed to remedy the anticompetitive effects resulting from AbbVie's proposed acquisition of Allergan. The proposed Decision and Order (''Order'') contained in the Consent Agreement requires Allergan to divest all rights and assets related to its Zenpep and Viokase products to Nestlé S.A. (''Nestlé''). The proposed Order also requires that Allergan return its rights and assets related to brazikumab to AstraZeneca plc (''AstraZeneca'').

The proposed Consent Agreement has been placed on the public record for thirty days so that interested persons may submit comments. Comments received during this period will become part of the public record. After thirty days, the Commission will review the comments received and decide whether it should withdraw, modify, or make the Consent Agreement final.

Pursuant to a Scheme of Arrangement under Irish law, AbbVie will acquire all of the voting securities of Allergan from its shareholders for approximately $63 billion (the ''Acquisition''). The Commission's Complaint alleges that the proposed Acquisition, if consummated, would violate Section 7 of the Clayton Act, as amended, 15 U.S.C. 18, and Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. 45, by substantially lessening competition in the U.S. markets for (1) prescription drugs for the treatment of exocrine pancreatic insufficiency (''EPI''); (2) Interleukin-23 (''IL–23'') inhibitors for the treatment of moderate-to-severe Crohn's disease; and (3) IL–23 inhibitors for the treatment of moderate-to-severe ulcerative colitis. The proposed Consent Agreement will remedy the alleged violations by preserving the competition that otherwise would be lost in these markets as a result of the proposed Acquisition.

II. The Parties

Headquartered in North Chicago, Illinois, AbbVie researches, develops, manufactures, and sells prescription pharmaceutical products and biologic products in several therapeutic areas, including immunology, oncology, virology, neuroscience, and women's health. Among other products, AbbVie sells a product to treat EPI and is developing an IL–23 inhibitor to treat moderate-to-severe Crohn's disease and ulcerative colitis. Like AbbVie, Allergan researches, develops, manufactures, and sells prescription pharmaceutical products in the United States. Among its products, Allergan also sells a product to treat EPI and is developing an IL–23 inhibitor to treat moderate-to-severe Crohn's disease and ulcerative colitis.

III. The Relevant Products and Structure of the Markets

A. Drugs for the Treatment of Exocrine Pancreatic Insufficiency

EPI is a condition that results from a deficiency of pancreatic enzymes. Patients who have EPI cannot properly digest fats, proteins, and carbohydrates in the foods they eat and, as a result, may suffer from malnutrition and have uncomfortable gastrointestinal symptoms when they eat. EPI is treated using pancreatic enzyme products. Pancreatic enzyme products contain the active ingredient pancrelipase, a mixture of the digestive enzymes amylase, lipase, and protease that is extracted from the pancreas of a pig.

Only four companies sell prescription pancreatic enzyme product in the United States: AbbVie, Allergan, Vivus Inc. (''Vivus''), and Chiesi USA, Inc. (''Chiesi''). AbbVie is the clear market leader with its product, Creon, and Allergan is the second-largest supplier, with its product, Zenpep. Vivus sells Pancreaze and Chiesi sells Pertzye. Allergan also sells a second pancreatic enzyme product, Viokase, although its sales in the United States are much more limited. Together, AbbVie and Allergan have a share of more than 95

percent of the market for drugs to treat EPI.

B. Interleukin-23 Inhibitors for the Treatment of Moderate-to-Severe Crohn's Disease and for the Treatment of Moderate-to-Severe Ulcerative Colitis

Ulcerative colitis and Crohn's disease are the most common causes of chronic inflammation of the digestive tract. Both diseases have similar symptoms—severe diarrhea, abdominal pain, fatigue, and weight loss—and both can be debilitating and lead to life-threatening complications. The location of the inflammation is the primary difference between the two diseases: Ulcerative colitis is a continuous inflammation of the colon, affecting only the innermost lining, while Crohn's disease can occur anywhere between the mouth and the anus, has healthy parts of the digestive tract between inflamed parts, and can occur in all layers of the bowel walls. Because the diseases are similar, drugs that are effective in treating ulcerative colitis are also typically effective in treatment Crohn's disease (and vice versa), but the United States Food and Drug Administration (''FDA'') requires that companies seeking ulcerative colitis and Crohn's disease indications for drugs conduct separate clinical studies and submit separate applications to market drugs for each indication.

Various drugs are approved to treat ulcerative colitis and Crohn's disease, but the effectiveness for most drugs is limited. IL–23 inhibitors are a new class of drugs to treat both diseases. Johnson & Johnson's Stelara is the only IL–23 inhibitor currently approved to treat moderate-to-severe Crohn's disease and ulcerative colitis in the United States. Stelara is both an IL–23 inhibitor and an Interleukin-12 inhibitor. Only three other companies—AbbVie, Allergan, and Eli Lilly and Company—have IL–23 inhibitors in late-stage development for ulcerative colitis and Crohn's disease. Allergan is developing brazikumab and AbbVie is developing Skyrizi.

IV. The Relevant Geographic Market

The United States is the relevant geographic market in which to assess the competitive effects of the proposed Acquisition. Drugs to treat EPI and drugs to treat moderate-to-severe ulcerative colitis and Crohn's disease are prescription pharmaceutical products and regulated by FDA. As such, products sold outside the United States, but not approved for sale in the United States, do not provide viable competitive alternatives for U.S. consumers.

V. Competitive Effects of the Acquisition

The proposed Acquisition would likely result in substantial competitive harm to consumers in the markets for prescription drugs for the treatment of EPI, IL–23 inhibitors for the treatment of moderate-to-severe Crohn's disease, and IL–23 inhibitors for the treatment of moderate-to-severe ulcerative colitis. Together, AbbVie and Allergan account for more than 95 percent of the market for drugs to treat EPI, and they are two of a limited number of companies in late-stage development with IL–23 inhibitors to treat moderate-to-severe ulcerative colitis and Crohn's disease.

VI. Entry Conditions

Entry in the relevant markets would not be timely, likely, or sufficient in magnitude, character, and scope to deter or counteract the anticompetitive effects of the proposed Acquisition. New entry would require significant investment of time and money for product research and development, regulatory approval by the FDA, developing clinical history supporting the long-term efficacy of the product, and establishing a U.S. sales and service infrastructure. Such development efforts are difficult, time-consuming, and expensive, and often fail to result in a competitive product reaching the market.

VII. The Consent Agreement

The Consent Agreement eliminates the competitive concerns raised by the proposed Acquisition by requiring the combined company to divest Allergan's Zenpep and Viokase business, including its regulatory approvals, intellectual property, contracts, and inventory to Nestlé, and Allergan's brazikumab business to AstraZeneca. AbbVie and Allergan also must transfer all business information, research and development information, regulatory, formulation, and manufacturing reports related to the divested products, as well as provide access to knowledgeable employees to assist in the transfer. The provisions of the Consent Agreement ensure that Nestlé and AstraZeneca become independent, viable, and effective competitors in the U.S. markets.

Nestlé is the world's largest food and beverage company, operating in more than 190 countries around the world. While the company is most well-known for its chocolate products, it also operates Nestlé Health Science, an integrated health company that focuses on nutrition products, including enteral feeding products that are used in hospitals and at home by patients who are unable to chew or swallow food. Nestlé's existing business includes products that are highly complementary to the divestiture assets. Nestlé has the expertise, U.S. sales infrastructure, and resources to restore the competition that otherwise would have been lost due to the proposed Acquisition.

AstraZeneca is a global research-based pharmaceutical company specializing in researching, developing, manufacturing, and marketing prescription products. AstraZeneca was responsible for conducting some of the early phase clinical studies for brazikumab, but out-licensed the product to Allergan in 2016. AstraZeneca is a well-qualified buyer for brazikumab because, as the original innovator of the product, it already has experience developing brazikumab prior to out-licensing it to Allergan, and, further, the key team members who were previously responsible for brazikumab's development are still employed by the company and will take responsibility for the developing the product. With its resources, capabilities, and previous experience with brazikumab, AstraZeneca is well positioned to successfully develop and commercialize the product and thereby replace the competition that otherwise would have been lost through the proposed Acquisition.

AbbVie and Allergan must accomplish the divestitures no later than ten days after consummating the proposed Acquisition. If the Commission determines that Nestlé or AstraZeneca are not acceptable acquirers, or that the manner of the divestitures is not acceptable, the proposed Order requires AbbVie and Allergan to unwind the sale of rights and assets and then divest the affected product to a Commission-approved acquirer within six months of the date the Order becomes final. The Commission has agreed to appoint a Monitor to ensure that AbbVie and Allergan comply with all of their obligations pursuant to the Consent Agreement and to keep the Commission informed about the status of the transfer of the rights and assets to the buyers. The proposed Order further allows the Commission to appoint a trustee in the event that AbbVie and Allergan fail to divest the products as required.

The purpose of this analysis is to facilitate public comment on the Consent Agreement, and it is not intended to constitute an official interpretation of the proposed Order or to modify its terms in any way.

By direction of the Commission.

April J. Tabor,

Acting Secretary.

[FR Doc. 2020–10081 Filed 5–11–20; 8:45 am]

BILLING CODE 6750–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

[Document Identifier CMS–8003]

Agency Information Collection Activities: Proposed Collection; Comment Request

AGENCY: Centers for Medicare & Medicaid Services, HHS.

ACTION: Notice.

SUMMARY: The Centers for Medicare & Medicaid Services (CMS) is announcing an opportunity for the public to comment on CMS' intention to collect information from the public. Under the Paperwork Reduction Act of 1995 (the PRA), federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information (including each proposed extension or reinstatement of an existing collection of information) and to allow 60 days for public comment on the proposed action. Interested persons are invited to send comments regarding our burden estimates or any other aspect of this collection of information, including the necessity and utility of the proposed information collection for the proper performance of the agency's functions, the accuracy of the estimated burden, ways to enhance the quality, utility, and clarity of the information to be collected, and the use of automated collection techniques or other forms of information technology to minimize the information collection burden.

DATES: Comments must be received by July 13, 2020.

ADDRESSES: When commenting, please reference the document identifier or OMB control number. To be assured consideration, comments and recommendations must be submitted in any one of the following ways:

1. *Electronically.* You may send your comments electronically to *http://www.regulations.gov.* Follow the instructions for ''Comment or Submission'' or ''More Search Options'' to find the information collection document(s) that are accepting comments.

2. *By regular mail.* You may mail written comments to the following address: CMS, Office of Strategic Operations and Regulatory Affairs, Division of Regulations Development, Attention: Document Identifier/OMB Control Number ____ , Room C4–26–05, 7500 Security Boulevard, Baltimore, Maryland 21244–1850.

To obtain copies of a supporting statement and any related forms for the proposed collection(s) summarized in this notice, you may make your request using one of following:

1. Access CMS' website address at website address at *https://www.cms.gov/Regulations-and-Guidance/Legislation/PaperworkReductionActof1995/PRA-Listing.html.*

2. Email your request, including your address, phone number, OMB number, and CMS document identifier, to *Paperwork@cms.hhs.gov.*

3. Call the Reports Clearance Office at (410) 786–1326.

FOR FURTHER INFORMATION CONTACT: William N. Parham at (410) 786–4669.

SUPPLEMENTARY INFORMATION:

Contents

This notice sets out a summary of the use and burden associated with the following information collections. More detailed information can be found in each collection's supporting statement and associated materials (see **ADDRESSES**).

CMS-8003 1915(c) Home and Community Based Services (HCBS) Waiver

Under the PRA (44 U.S.C. 3501–3520), federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. The term ''collection of information'' is defined in 44 U.S.C. 3502(3) and 5 CFR 1320.3(c) and includes agency requests or requirements that members of the public submit reports, keep records, or provide information to a third party. Section 3506(c)(2)(A) of the PRA requires federal agencies to publish a 60-day notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension or reinstatement of an existing collection of information, before submitting the collection to OMB for approval. To comply with this requirement, CMS is publishing this notice.

Information Collection

1. *Type of Information Collection Request:* Reinstatement without change of a previously approved collection; *Title of Information Collection:* 1915(c) Home and Community Based Services (HCBS) Waiver; *Use:* We will use the web-based application to review and adjudicate individual waiver actions. The web-based application will also be used by states to submit and revise their waiver requests. *Form Number:* CMS–8003 (OMB control number 0938–0449); *Frequency:* Yearly; *Affected Public:* State, Local, or Tribal Governments; *Number of Respondents:* 47; *Total Annual Responses:* 71; *Total Annual Hours:* 6,005. (For policy questions regarding this collection contact Kathy Poisal at 410–786–5940.)

Dated: *May 7, 2020.*

William N. Parham, III,

Director, Paperwork Reduction Staff, Office of Strategic Operations and Regulatory Affairs.

[FR Doc. 2020–10095 Filed 5–11–20; 8:45 am]

BILLING CODE 4120–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket Nos. FDA–2020–D–1106, FDA–2020–D–1137, FDA–2020–D–1138, FDA–2020–D–1139, and FDA–2020–D–1140]

Guidance Documents Related to Coronavirus Disease 2019 (COVID–19); Availability

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice of availability.

SUMMARY: The Food and Drug Administration (FDA or Agency) is announcing the availability of FDA guidance documents related to the Coronavirus Disease 2019 (COVID–19) public health emergency (PHE). This notice is pursuant to the process that FDA announced, in the **Federal Register** of March 25, 2020, for making available to the public COVID–19-related guidances. The guidances identified in this notice address issues related to the COVID–19 PHE and have been issued in accordance with the process announced in the March 25, 2020, document. The guidance documents have been implemented without prior comment, but they remain subject to comment in accordance with the Agency's good guidance practices.

DATES: The announcement of the guidances is published in the **Federal Register** on May 12, 2020. The guidance documents have been implemented without prior comment, but they remain subject to comment in accordance with the Agency's good guidance practices.

ADDRESSES: You may submit either electronic or written comments on Agency guidances at any time as follows:

Electronic Submissions

Submit electronic comments in the following way:

• *Federal eRulemaking Portal: https://www.regulations.gov.* Follow the instructions for submitting comments. Comments submitted electronically, including attachments, to *https://www.regulations.gov* will be posted to the docket unchanged. Because your comment will be made public, you are solely responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as medical information, your or anyone else's Social Security number, or confidential business information, such as a manufacturing process. Please note that if you include your name, contact information, or other information that identifies you in the body of your comments, that information will be posted on *https://www.regulations.gov.*

• If you want to submit a comment with confidential information that you do not wish to be made available to the public, submit the comment as a written/paper submission and in the manner detailed (see ''Written/Paper Submissions'' and ''Instructions'').

Written/Paper Submissions

Submit written/paper submissions as follows:

• *Mail/Hand delivery/Courier (for written/paper submissions):* Dockets Management Staff (HFA–305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

• For written/paper comments submitted to the Dockets Management Staff, FDA will post your comment, as well as any attachments, except for information submitted, marked and identified, as confidential, if submitted as detailed in ''Instructions.''

Instructions: All submissions received must include the name of the guidance document that the comments address and the docket number for the guidance (see table 1). Received comments will be placed in the docket(s) and, except for those submitted as ''Confidential Submissions,'' publicly viewable at *https://www.regulations.gov* or at the Dockets Management Staff between 9 a.m. and 4 p.m., Monday through Friday.

• Confidential Submissions—To submit a comment with confidential information that you do not wish to be made publicly available, submit your comments only as a written/paper submission. You should submit two copies total. One copy will include the information you claim to be confidential with a heading or cover note that states ''THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION.'' The Agency will review this copy, including the claimed confidential information, in its consideration of comments. The second copy, which will have the claimed confidential information redacted/blacked out, will be available for public viewing and posted on *https://www.regulations.gov.* Submit both copies to the Dockets Management Staff. If you do not wish your name and contact information to be made publicly available, you can provide this information on the cover sheet and not in the body of your comments and you must identify this information as ''confidential.'' Any information marked as ''confidential'' will not be disclosed except in accordance with 21 CFR 10.20 and other applicable disclosure law. For more information about FDA's posting of comments to public dockets, see 80 FR 56469, September 18, 2015, or access the information at: *https://www.govinfo.gov/content/pkg/FR-2015-09-18/pdf/2015-23389.pdf.*

Docket: For access to the docket to read background documents or the electronic and written/paper comments received, go to *https://www.regulations.gov* and insert the docket number, found in brackets in the heading of this document, into the ''Search'' box and follow the prompts and/or go to the Dockets Management Staff, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

You may submit comments on any guidance at any time (see § 10.115(g)(5) (21 CFR 10.115(g)(5))).

Submit written requests for single copies of any of these guidances to the addresses noted in table 1. Where applicable, send two self-addressed adhesive labels to assist that office in processing your requests. See the **SUPPLEMENTARY INFORMATION** section for electronic access to the guidance document.

FOR FURTHER INFORMATION CONTACT: Stephen Ripley, Center for Biologics Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 71, Rm. 7301, Silver Spring, MD 20993–0002, 240–402–7911; Erica Takai, Center for Devices and Radiological Health, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 66, Rm. 5456, Silver Spring, MD 20993–0002, 301–796–6353; Phil Chao, Center for Food Safety and Applied Nutrition, Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740, 240–402–2112; Kimberly Thomas, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 51, Rm. 6220, Silver Spring, MD 20993–0002, 301–796–2357; Diane Heinz, Center for Veterinary Medicine, Food and Drug Administration, 7500 Standish Pl., Rockville, MD 20855, 240–402–5692.

SUPPLEMENTARY INFORMATION:

I. Background

On January 31, 2020, as a result of confirmed cases of COVID–19, and after consultation with public health officials as necessary, Alex M. Azar II, Secretary of Health and Human Services (HHS), pursuant to the authority under section 319 of the Public Health Service Act (PHS Act) (42 U.S.C. 247d), determined that a PHE exists and has existed since January 27, 2020, nationwide.[1] On March 13, 2020, President Donald J. Trump declared that the COVID–19 outbreak in the United States constitutes a national emergency, beginning March 1, 2020.[2]

In the **Federal Register** of March 25, 2020 (85 FR 16949) (the March 25, 2020, notice) (available at: *https://www.govinfo.gov/content/pkg/FR-2020-03-25/pdf/2020-06222.pdf*), FDA announced procedures for making available FDA guidance documents related to the COVID–19 PHE. These procedures, which operate within FDA's established good guidance practices regulations, are intended to allow FDA to rapidly disseminate Agency recommendations and policies related to COVID–19 to industry, FDA staff, and other stakeholders. The March 25, 2020, notice stated that due to the need to act quickly and efficiently to respond to the COVID–19 PHE, FDA believes that prior public participation will not be feasible or appropriate before FDA implements COVID–19-related guidance documents. Therefore, FDA will issue COVID–19-related guidance documents for immediate implementation without prior public comment (see section 701(h)(1)(C) of the Federal Food, Drug, and Cosmetic Act (FD&C Act) (21 U.S.C. 371(h)(1)(C) and § 10.115(g)(2)). The guidances are available on FDA's web page ''COVID–19-Related Guidance Documents for Industry, FDA Staff, and Other Stakeholders'' (*https://www.fda.gov/emergency-preparedness-and-response/mcm-issues/covid-19-*

[1] On April 21, 2020, the PHE Determination was extended, effective April 26, 2020. These PHE Determinations are available at *https://www.phe.gov/emergency/news/healthactions/phe/Pages/default.aspx.*

[2] Proclamation on Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID–19) Outbreak (March 13, 2020), available at *https://www.whitehouse.gov/presidential-actions/proclamation-declaring-national-emergency-concerning-novel-coronavirus-disease-covid-19-outbreak/.*

related-guidance-documents-industry-fda-staff-and-other-stakeholders) and through FDA's web page ''Search for FDA Guidance Documents'' (*https://www.fda.gov/regulatory-information/search-fda-guidance-documents*).

The March 25, 2020, notice further stated that, in general, rather than publishing a separate notice of availability (NOA) for each COVID–19-related guidance document, FDA intends to publish periodically a consolidated NOA announcing the availability of COVID–19-related guidance documents FDA issued during the relevant period. This notice announces certain COVID–19-related guidances that are posted on FDA's website, as included in table 1.

Lastly, the March 25, 2020, notice indicated that, in general, guidance documents would be placed in dockets established for COVID–19-related guidance documents issued by each Center. As noted in table 1, certain COVID–19-related guidance documents issued by the Center for Drug Evaluation and Research (CDER) prior to March 24, 2020, were placed in Docket No. FDA–2020–D–1106. FDA anticipates that, in general, CDER will use Docket No. FDA–2020–D–1136 for additional COVID–19-related guidance documents issued pursuant to the process described in the March 25, 2020, notice.

II. Availability of COVID–19-Related Guidance Documents

Pursuant to the process described in the March 25, 2020, notice, FDA is announcing the availability of the following COVID–19-related guidance documents:

TABLE 1— GUIDANCES RELATED TO THE COVID–19 PUBLIC HEALTH EMERGENCY

Docket No.	Center/office	Title of guidance	Contact information to request single copies
FDA–2020–D–1137	Center for Biologics Evaluation and Research (CBER).	Alternative Procedures for Blood and Blood Components During the COVID–19 Public Health Emergency (April 2020).	Office of Communication, Outreach and Development, Center for Biologics Evaluation and Research, 10903 New Hampshire Ave., Bldg. 71, Rm. 3128, Silver Spring, MD 20993–0002, 1–800–835–4709 or 240–402–8010; email *ocod@fda.hhs.gov.*
FDA–2020–D–1138	Center for Devices and Radiological Health (CDRH).	Enforcement Policy for Non-Invasive Remote Monitoring Devices Used to Support Patient Monitoring During the Coronavirus Disease-2019 (COVID–19) Public Health Emergency (March 2020).	*CDRH-Guidance@fda.hhs.gov.* Please include the document number 20014 and complete title of the guidance in the request.
FDA–2020–D–1138	CDRH	Enforcement Policy for Ventilators and Accessories and Other Respiratory Devices During the Coronavirus Disease 2019 (COVID–19) Public Health Emergency (March 2020).	*CDRH-Guidance@fda.hhs.gov.* Please include the document number 20015 and complete title of the guidance in the request.
FDA–2020–D–1138	CDRH	Enforcement Policy for Sterilizers, Disinfectant Devices, and Air Purifiers During the Coronavirus Disease 2019 (COVID–19) Public Health Emergency (March 2020).	*CDRH-Guidance@fda.hhs.gov* Please include the document number 20019 and complete title of the guidance in the request.
FDA–2020–D–1138	CDRH	Enforcement Policy for Gowns, Other Apparel, and Gloves During the Coronavirus Disease (COVID–19) Public Health Emergency (March 2020).	*CDRH-Guidance@fda.hhs.gov* Please include the document number 20020 and complete title of the guidance in the request.
FDA–2020–D–1138	CDRH	Enforcement Policy for Face Masks and Respirators During the Coronavirus Disease (COVID–19) Public Health Emergency (Issued March 25, 2020) (Revised April 2, 2020).	*CDRH-Guidance@fda.hhs.gov.* Please include the document number 20018 and complete title of the guidance in the request.
FDA–2020–D–1139	Center for Food Safety and Applied Nutrition (CFSAN).	Temporary Policy Regarding Nutrition Labeling of Certain Packaged Food During the COVID–19 Public Health Emergency (March 2020).	Office of Nutrition and Food Labeling, Food Labeling and Standards Staff, Center for Food Safety and Applied Nutrition, Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740.
FDA–2020–D–1139	CFSAN	Temporary Policy Regarding Nutrition Labeling of Standard Menu Items in Chain Restaurants and Similar Retail Food Establishments During the COVID–19 Public Health Emergency (April 2020).	Office of Nutrition and Food Labeling, Food Labeling and Standards Staff, Center for Food Safety and Applied Nutrition, Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740.
FDA–2020–D–1139	CFSAN	Temporary Policy Regarding Packaging and Labeling of Shell Eggs Sold by Retail Food Establishments During the COVID–19 Public Health Emergency (April 2020).	Office of Nutrition and Food Labeling, Food Labeling and Standards Staff, Center for Food Safety and Applied Nutrition, Food and Drug Administration, 5001 Campus Dr., College Park, MD 20740.
FDA–2020–D–1106	CDER	FDA Guidance on Conduct of Clinical Trials of Medical Products during COVID–19 Public Health Emergency (March 18, 2020) (Updated March 27, 2020, April 2, 2020, and April 16, 2020).	*Clinicaltrialconduct-COVID19@fda.hhs.gov.* Please include the docket number FDA–2020–D–1106 and complete title of the guidance in the request.
FDA–2020–D–1106	CDER	Temporary Policy for Preparation of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (COVID–19) (March 19, 2020) (Updated March 27, 2020, and April 15, 2020).	*druginfo@fda.hhs.gov.* Please include the docket number FDA–2020–D–1106 and complete title of the guidance in the request.

TABLE 1— GUIDANCES RELATED TO THE COVID–19 PUBLIC HEALTH EMERGENCY—Continued

Docket No.	Center/office	Title of guidance	Contact information to request single copies
FDA–2020–D–1106	CDER	Policy for Certain REMS Requirements During the COVID–19 Public Health Emergency (March 2020).	*druginfo@fda.hhs.gov.* Please include the docket number FDA–2020–D–1106 and complete title of the guidance in the request.
FDA–2020–D–1106	CDER	Temporary Policy for Manufacture of Alcohol for Incorporation Into Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (COVID–19) Guidance for Industry (March 24, 2020) (Updated March 27, 2020, and April 15, 2020).	*druginfo@fda.hhs.gov.* Please include the docket number FDA–2020–D–1106 and complete title of the guidance in the request.
FDA–2020–D–1106	CDER	Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (March 2020) (Updated April 15, 2020).	*druginfo@fda.hhs.gov.* Please include the docket number FDA–2020–D–1106 and complete title of the guidance in the request.
FDA–2020–D–1140	Center for Veterinary Medicine (CVM).	CVM GFI #269—Enforcement Policy Regarding Federal VCPR Requirements to Facilitate Veterinary Telemedicine During the COVID–19 Outbreak (March 2020).	*AskCVM@fda.hhs.gov.* Please include the docket number FDA–2020–D–1140 and complete title of the guidance in the request.
FDA–2020–D–1140	CVM	CVM GFI #270—Guidance on the Conduct and Review of Studies to Support New Animal Drug Development during the COVID–19 Public Health Emergency (April 2020).	≤*AskCVM@fda.hhs.gov.* Please include the docket number FDA–2020–D–1140 and complete title of the guidance in the request.

Although these guidance documents have been implemented immediately without prior comment, FDA will consider all comments received and revise the guidances as appropriate (see § 10.115(g)(3)).

III. Significance of Guidances

These guidances are being issued consistent with FDA's good guidance practices regulation (§ 10.115). The guidances represent the current thinking of FDA. They do not establish any rights for any person and are not binding on FDA or the public. You can use an alternative approach if it satisfies the requirements of the applicable statutes and regulations.

IV. Paperwork Reduction Act of 1995

A. Center for Biologics Evaluation and Research

This guidance refers to previously approved collections of information. These collections of information are subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3521) (PRA). The collections of information in the following FDA regulations and guidance have been approved by OMB as listed in the following table:

COVID–19 guidance title	21 CFR Cite referenced in COVID–19 guidance	Another guidance title referenced in COVID–19 guidance	OMB Control No(s).
Alternative Procedures for Blood and Blood Components During the COVID–19 Public Health Emergency.	601.12 640.120 part 630	N/A	0910–0338 0910–0338 0910–0116

B. Center for Devices and Radiological Health

These guidances refer to previously approved collections of information. These collections of information are subject to review by OMB under the PRA. The collections of information in the following FDA regulations and guidance have been approved by OMB as listed in the following table:

COVID–19 guidance title	21 CFR Cite referenced in COVID–19 Guidance	Another guidance title referenced in COVID–19 guidance	OMB Control No(s).
Enforcement Policy for Non-Invasive Remote Monitoring Devices Used to Support Patient Monitoring During the Coronavirus Disease-2019 (COVID–19) Public Health Emergency.	807, subpart E 800, 801, and 809		0910–0120 0910–0485
Enforcement Policy for Ventilators and Accessories and Other Respiratory Devices During the Coronavirus Disease 2019 (COVID–19) Public Health Emergency.	800, 801, and 809 803 807, subpart E 812 820		0910–0485 0910–0437 0910–0120 0910–0078 0910–0073

COVID–19 guidance title	21 CFR Cite referenced in COVID–19 Guidance	Another guidance title referenced in COVID–19 guidance	OMB Control No(s).
		Emergency Use Authorization of Medical Products and Related Authorities; Guidance for Industry and Other Stakeholders.	0910–0595
Enforcement Policy for Sterilizers, Disinfectant Devices, and Air Purifiers During the Coronavirus Disease 2019 (COVID–19) Public Health Emergency.	800, 801, and 809		0910–0485
	807, subpart E		0910–0120
	807, subparts A through D		0910–0625
	814, subparts A through E		0910–0231
	820		0910–0073
	830 and 801.20		0910–0720
Enforcement Policy for Gowns, Other Apparel, and Gloves During the Coronavirus Disease (COVID–19) Public Health Emergency.	800, 801, and 809		0910–0485
	806		0910–0359
	807, subparts A through D		0910–0625
	807, subpart E		0910–0120
	820		0910–0073
	830 and 801.20		0910–0720
Enforcement Policy for Face Masks and Respirators During the Coronavirus Disease (COVID–19) Public Health Emergency (Revised).	800, 801, and 809		0910–0485
	803		0910–0437
	806		0910–0359
	807, subpart E		0910–0120
	807, subparts A through D		0910–0625
	820		0910–0073
	830 and 801.20		0910–0720
		Emergency Use Authorization of Medical Products and Related Authorities; Guidance for Industry and Other Stakeholders.	0910–0595

C. Center for Food Safety and Applied Nutrition

These guidances refer to previously approved collections of information. These collections of information are subject to review by OMB under the PRA. The collections of information in the following FDA regulations and guidances have been approved by OMB as listed in the following table:

COVID–19 guidance title	21 CFR Cite referenced in COVID–19 guidance	Another guidance title referenced in COVID–19 guidance	OMB Control No(s).
Temporary Policy Regarding Nutrition Labeling of Standard Menu Items in Chain Restaurants and Similar Retail Food Establishments During the COVID–19 Public Health Emergency.	101.11		0910–0782
Temporary Policy Regarding Packaging and Labeling of Shell Eggs Sold by Retail Food Establishments During the COVID–19 Public Health Emergency.	part 101	Temporary Policy Regarding Nutrition Labeling of Certain Packaged Food During the COVID19 Public Health Emergency; 0910–0381, 0910–0792.	0910–0381

This guidance refers to previously approved collections of information. These collections of information are subject to review by OMB under the PRA. The collections of information in the following FDA regulations and guidance have been approved by OMB as listed in the table below. This guidance also contains a new collection of information not approved under a current collection. This new collection of information has been granted a PHE waiver from the PRA by HHS on March 19, 2020, under section 319(f) of the PHS Act. Information concerning the PHE PRA waiver can be found on the HHS website at *https://aspe.hhs.gov/public-health-emergency-declaration-pra-waivers.*

COVID–19 guidance title	21 CFR Cite referenced in COVID–19 guidance	Another guidance referenced in COVID–19 guidance	OMB Control No(s).	New collection covered by PHE PRA waiver
Temporary Policy Regarding Nutrition Labeling of Certain Packaged Food During the COVID–19 Public Health Emergency.	part 101; section 403(w) of the FD&C Act (21 U.S.C. 343(w)).	.....	0910–0381, 0910–0792	If a food product does not have the required labeling information, a restaurant may create a label to include this information (new respondent).

D. Center for Drug Evaluation and Research

This guidance refers to previously approved collections of information. These collections of information are subject to review by OMB under the PRA. The collections of information in the following FDA regulations and guidances have been approved by OMB as listed in the following table:

COVID–19 guidance title	21 CFR Cite referenced in COVID–19 guidance	Another guidance referenced in COVID–19 guidance	OMB Control No(s).
FDA Guidance on Conduct of Clinical Trials of Medical Products during COVID–19 Public Health Emergency (Updated).	50.27(a) 312.30 312.60 312.62 812.35(a) 812.140	Use of Electronic Informed Consent in Clinical Investigations.	0910–0001 0910–0014 0910–0755

These guidances refer to previously approved collections of information. These collections of information are subject to review by OMB under the PRA. The collections of information in the following FDA regulations and guidance have been approved by OMB as listed in the table below. These guidances also contain a new collection of information not approved under a current collection. This new collection of information has been granted a PHE waiver from the PRA by HHS on March 19, 2020, under section 319(f) of the PHS Act. Information concerning the PHE PRA waiver can be found on the HHS website at *https://aspe.hhs.gov/public-health-emergency-declaration-pra-waivers.*

COVID–19 guidance title	21 CFR Cite referenced in COVID–19 guidance	Another guidance referenced in COVID–19 guidance	OMB Control No(s).	New collection covered by PHE PRA waiver
Temporary Policy for Preparation of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (COVID–19).	.....	Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency. Temporary Policy for Manufacture of Alcohol for Incorporation Into Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (COVID–19). Providing Regulatory Submissions in Electronic Format—Drug Establishment Registration and Drug Listing. Postmarketing Adverse Event Reporting for Nonprescription Human Drug Products Marketed Without an Approved Application.	0910–0045 0910–0139 0910–0230 0910–0291 0910–0340 0910–0641 0910–0645 0910–0800	For proposed use of an alternative grade of ethanol, firms are requested to submit to FDA information on the ethanol concentration and levels of impurities listed in the USP monograph and other potentially harmful impurities in the manufacturing environment.

COVID–19 guidance title	21 CFR Cite referenced in COVID–19 guidance	Another guidance referenced in COVID–19 guidance	OMB Control No(s).	New collection covered by PHE PRA waiver
Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (Updated).	.....	Current Good Manufacturing Practices for Finished Pharmaceuticals and Medical Gases. Postmarketing Adverse Drug Experience Reporting. MedWatch: Adverse Event and Product Experience Reporting System (Paper-Based). Format and Content Requirements for Over-the-Counter Drug Product Labeling. FDA Adverse Event and Product Experience Reports; Electronic Submissions. Adverse Event Reporting for Outsourcing Facilities Under Section 503B of the Federal Food, Drug, and Cosmetic Act. Temporary Policy for Preparation of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (COVID–19). Temporary Policy for Manufacture of Alcohol for Incorporation Into Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (COVID–19).	0910–0139 0910–0230 0910–0291 0910–0340 0910–0645	For proposed use of an alternative grade of ethanol, firms are requested to submit to FDA information on the ethanol concentration and levels of impurities listed in the USP monograph and other potentially harmful impurities in the manufacturing environment.
Temporary Policy for Manufacture of Alcohol for Incorporation Into Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (COVID–19).	.....	Policy for Temporary Compounding of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency. Temporary Policy for Preparation of Certain Alcohol-Based Hand Sanitizer Products During the Public Health Emergency (COVID–19). Providing Regulatory Submissions in Electronic Format—Drug Establishment Registration and Drug Listing.	0910–0045 0910–0139 0910–0230 0910–0291 0910–0340 0910–0641 0910–0645	For proposed use of an alternative grade of ethanol, firms are requested to submit to FDA information on the ethanol concentration and levels of impurities listed in the USP monograph and other potentially harmful impurities in the manufacturing environment.

The final guidance entitled ''Policy for Certain REMS Requirements During the COVID–19 Public Health Emergency'' contains no collection of information. Therefore, clearance by OMB under the PRA is not required.

E. Center for Veterinary Medicine

This guidance refers to previously approved collections of information. These collections of information are subject to review by OMB under the PRA. The collections of information in the following FDA regulations and guidance have been approved by OMB as listed in the following table:

COVID–19 guidance title	21 CFR Cite referenced in COVID–19 guidance	Another guidance title referenced in COVID–19 guidance	OMB Control No(s).
GFI #270—Guidance on the Conduct and Review of Studies to Support New Animal Drug Development during the COVID–19 Public Health Emergency.	.....	FDA Guidance on Conduct of Clinical Trials of Medical Products during COVID–19 Public Health Emergency.	0910–0032 0910–0669

The final guidance entitled ''GFI #269—Enforcement Policy Regarding Federal VCPR Requirements to Facilitate Veterinary Telemedicine During the COVID–19 Outbreak'' contains no collection of information. Therefore, clearance by OMB under the PRA is not required.

V. Electronic Access

Persons with access to the internet may obtain COVID–19-related guidances at the FDA web page ''COVID–19-Related Guidance Documents for Industry, FDA Staff, and Other Stakeholders,'' available at *https://www.fda.gov/emergency-preparedness-and-response/mcm-issues/covid-19-related-guidance-documents-industry-fda-staff-and-other-stakeholders;* the FDA web page ''Search for FDA Guidance Documents,'' available at *https://www.fda.gov/regulatory-information/search-fda-guidance-documents;* or *https://www.regulations.gov.*

Dated: May 7, 2020.

Lowell J. Schiller,

Principal Associate Commissioner for Policy.

[FR Doc. 2020–10146 Filed 5–11–20; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

[Docket No. FDA–2020–N–1081]

Hospira Inc., et al.; Withdrawal of Approval of Seven Abbreviated New Drug Applications

AGENCY: Food and Drug Administration, HHS.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA or Agency) is withdrawing approval of seven abbreviated new drug applications (ANDAs) from multiple applicants. The

applicants notified the Agency in writing that the drug products were no longer marketed and requested that the approval of the applications be withdrawn.

DATES: Approval is withdrawn as of June 11, 2020.

FOR FURTHER INFORMATION CONTACT: Martha Nguyen, Center for Drug Evaluation and Research, Food and Drug Administration, 10903 New Hampshire Ave., Bldg. 75, Rm. 1676, Silver Spring, MD 20993–0002, 240–402–6980, *Martha.Nguyen@fda.hhs.gov.*

SUPPLEMENTARY INFORMATION: The applicants listed in the table have informed FDA that these drug products are no longer marketed and have requested that FDA withdraw approval of the applications under the process described in § 314.150(c) (21 CFR 314.150(c)). The applicants have also, by their requests, waived their opportunity for a hearing. Withdrawal of approval of an application or abbreviated application under § 314.150(c) is without prejudice to refiling.

Application No.	Drug	Applicant
ANDA 065232	Ceftriaxone Sodium for Injection, Equivalent to (EQ) 10 grams (g) base/vial.	Hospira Inc., 275 North Field Dr., Building H1, Lake Forest, IL 60045.
ANDA 088697	Amitriptyline Hydrochloride (HCl) Tablets, 10 milligrams (mg).	Par Pharmaceutical Inc., One Ram Ridge Rd., Spring Valley, NY 10977.
ANDA 088698	Amitriptyline HCl Tablets, 25 mg	Par Pharmaceutical Inc.
ANDA 088699	Amitriptyline HCl Tablets, 50 mg	Do.
ANDA 088700	Amitriptyline HCl Tablets, 75 mg	Do.
ANDA 088701	Amitriptyline HCl Tablets, 100 mg	Do.
ANDA 088702	Amitriptyline HCl Tablets, 150 mg	Do.

Therefore, approval of the applications listed in the table, and all amendments and supplements thereto, is hereby withdrawn as of June 11, 2020. Approval of each entire application is withdrawn, including any strengths and dosage forms inadvertently missing from the table. Introduction or delivery for introduction into interstate commerce of products without approved new drug applications violates section 301(a) and (d) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 331(a) and (d)). Drug products that are listed in the table that are in inventory on June 11, 2020, may continue to be dispensed until the inventories have been depleted or the drug products have reached their expiration dates or otherwise become violative, whichever occurs first.

Dated: May 6, 2020.

Lowell J. Schiller,

Principal Associate Commissioner for Policy.

[FR Doc. 2020–10082 Filed 5–11–20; 8:45 am]

BILLING CODE 4164–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Resources and Services Administration

Agency Information Collection Activities: Submission to OMB for Review and Approval; Public Comment Request; Nurse Faculty Loan Program—Program Specific Data Form and Annual Performance Report Financial Data Form OMB No. 0915–0314–Revision

AGENCY: Health Resources and Services Administration (HRSA), Department of Health and Human Services (HHS).

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act of 1995, HRSA has submitted an Information Collection Request (ICR) to the Office of Management and Budget (OMB) for review and approval. Comments submitted during the first public review of this ICR have been provided to OMB. OMB will accept further comments from the public during the review and approval period. OMB may act on HRSA's ICR only after the 30 day comment period for this notice has closed.

DATES: Comments on this ICR should be received no later than June 11, 2020.

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 particular information collection by selecting ''Currently under Review—Open for Public Comments'' or by using the search function.

FOR FURTHER INFORMATION CONTACT: To request a copy of the clearance requests submitted to OMB for review, email Lisa Wright-Solomon, the HRSA Information Collection Clearance Officer at *paperwork@hrsa.gov* or call (301) 443–1984.

SUPPLEMENTARY INFORMATION:

Information Collection Request Title: Nurse Faculty Loan Program—Program Specific Data Form and Annual Performance Report Financial Data Form OMB No. 0915–0314–Revision.

Abstract: This clearance request is for approval of both the Nurse Faculty Loan Program (NFLP) Program Specific Data Form and the Annual Performance Report (APR) Financial Data Form. The APR Financial Data Form is currently approved under OMB Approval No. 0915–0314 and the Program Specific Data Form is currently approved under OMB Approval No. 0915–0378, both with the expiration date of July 31, 2020. The APR Form was previously titled as the Nurse Faculty Loan Program, Annual Operating Report. For program efficiency, HRSA is combining these previously separate ICRs under OMB No. 0915–0314 and will be discontinuing OMB No. 0915–0378.

A 60-day notice published in the **Federal Register** on February 7, 2020, vol. 85, No. 26; pp. 7315–7316. There were no public comments.

Need and Proposed Use of the Information: Section 846A of the Public Health Service Act provides the Secretary of HHS with the authority to enter into an agreement with schools of nursing for the establishment and

operation of a student loan fund to increase the number of qualified nurse faculty.

Under the agreement, HRSA makes awards to the school for the NFLP loan fund, which must be maintained in a distinct account. The school of nursing makes loans from the NFLP account to students enrolled full-time or, at the discretion of the Secretary, part-time, in a master's or doctoral nursing education program that will prepare them to become qualified nursing faculty. Following graduation from the NFLP lending school, loan recipients may receive up to 85 percent NFLP loan cancellation over a four-year period in exchange for service as full-time faculty at a school of nursing. The NFLP lending school collects any portion of the loan that is not cancelled and any loans that go into repayment due to default, and deposits these monies into the NFLP loan fund to make additional NFLP loans.

The NFLP—Program Specific Data Form is a required electronic attachment within the NFLP application materials. The data provided in the form is essential for the formula-based criteria used to determine the award amount to the applicant schools. The form will collect application related data from applicants such as the amount requested, number of students to be funded, tuition information, and projected unused loan fund balance. Approval of the NFLP—Program Specific Data Form will allow HRSA to continue to efficiently capture data to generate the formula-based awards for the NFLP program. This data collection assists HRSA in streamlining the application submission process, enabling an efficient award determination process, and facilitating reporting on the use of funds and analysis of program outcomes.

HRSA is also seeking public comment on the NFLP–APR Financial Data Form. The NFLP–APR Financial Data Form is an online form that exists in the HRSA Electronic Handbooks (EHBs) Performance Report module. The NFLP–APR Financial Data Form will collect outcome and financial data to capture the NFLP loan fund account activity related to financial receivables, disbursements, and borrower account data related to employment status, loan cancellation, loan repayment and collections. Participating schools will provide HHS with current and cumulative information on: (1) NFLP loan funds received, (2) number and amount of NFLP loans made, (3) number and amount of loans cancelled, (4) number and amount of loans in repayment, (5) loan default rate percent, (6) number of NFLP graduates employed as nurse faculty, and (7) other related loan fund costs and activities.

The school of nursing must keep records of all NFLP loan fund transactions. The NFLP–APR Financial Data Form is used to monitor grantee performance by collecting information related to the NFLP loan fund operations and financial activities for a specified reporting period (July 1 through June 30 of the academic year). Participating schools are required to complete and submit the NFLP–APR Financial Data Form annually.

The data provided in the form is essential for HRSA to effectively monitor the school's use of NFLP funds in accordance with the statute and program guidelines. Approval of the NFLP–APR Financial Data Form extension will allow HRSA to continue to monitor program performance and program outcome.

Likely Respondents: Participating NFLP schools and applicants to the NFLP program.

Burden Statement: Burden in this context means the time expended by persons to generate, maintain, retain, disclose or provide the information requested. This includes the time needed to review instructions; to develop, acquire, install, and utilize technology and systems for the purpose of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; to train personnel and to be able to respond to a collection of information; to search data sources; to complete and review the collection of information; and to transmit or otherwise disclose the information. The total annual burden hours estimated for this ICR are summarized in the table below.

TOTAL ESTIMATED ANNUALIZED BURDEN HOURS

Form name	Number of respondents	Number of respondents per respondent	Total responses	Average burden per response (in hours)	Total burden hours
Nurse Faculty Loan Program—Program Specific Data Form	90	1	90	8	720
Nurse Faculty Loan Program—Annual Performance Report Financial Data Form	260	1	260	6	1,560
Total Burden	350		350		2,280

Maria G. Button,

Director, Executive Secretariat.

[FR Doc. 2020–10134 Filed 5–11–20; 8:45 am]

BILLING CODE 4165–15–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center for Scientific Review; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended, notice is hereby given of the following meetings.

The meetings 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: Vascular and Hematology Integrated Review Group; Hemostasis and Thrombosis Study Section.

Date: June 12, 2020.

Time: 8:00 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Ai-Ping Zou, MD, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4118, MSC 7814, Bethesda, MD 20892, 301–408–9497, *zouai@csr.nih.gov*.

Name of Committee: Oncology 2—Translational Clinical Integrated Review Group; Mechanisms of Cancer Therapeutics—2 Study Section.

Date: June 15–16, 2020.

Time: 8:00 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Careen K. Tang-Toth, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6214, MSC 7804, Bethesda, MD 20892, (301)435–3504, *tothct@csr.nih.gov*.

Name of Committee: Oncology 2—Translational Clinical Integrated Review Group; Cancer Immunopathology and Immunotherapy Study Section.

Date: June 17–18, 2020.

Time: 8:00 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Denise R Shaw, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6158, MSC 7804, Bethesda, MD 20892, 301–435–0198, *shawdeni@csr.nih.gov*.

Name of Committee: Digestive, Kidney and Urological Systems Integrated Review Group;Hepatobiliary Pathophysiology Study Section.

Date: June 17–18, 2020.

Time: 8:00 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Jianxin Hu, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 2156, Bethesda, MD 20892, 301–827–4417, *jianxinh@csr.nih.gov*.

Name of Committee: Integrative, Functional and Cognitive Neuroscience Integrated Review Group; Somatosensory and Pain Systems Study Section.

Date: June 17–18, 2020.

Time: 8:00 a.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892, (Virtual Meeting).

Contact Person: M. Catherine Bennett, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5182, MSC 7846, Bethesda, MD 20892, 301–435–1766, *bennettc3@csr.nih.gov*.

Name of Committee: Center for Scientific Review Special Emphasis Panel; Member Conflict: Community Level Health Promotion and Behavior and Implementation Research.

Date: June 17, 2020.

Time: 9:00 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Telephone Conference Call).

Contact Person: Preethy Nayar, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3156, Bethesda, MD 20892, *nayarp2@csr.nih.gov*.

Name of Committee: Endocrinology, Metabolism, Nutrition and Reproductive Sciences Integrated Review Group, Cellular Aspects of Diabetes and Obesity Study Section.

Date: June 17–18, 2020.

Time: 9:00 a.m. to 6:30 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Antonello Pileggi, MD, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6166, Bethesda, MD 20892–7892, (301) 402–6297, *pileggia@csr.nih.gov*.

Name of Committee: Population Sciences and Epidemiology Integrated Review Group; Neurological, Aging and Musculoskeletal Epidemiology Study Section.

Date: June 17–18, 2020.

Time: 10:00 a.m. to 7:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health Rockledge II 6701 Rockledge Dr. Bethesda, MD 20892 (Virtual Meeting)

Contact Person: Heidi B Friedman, Ph.D. Scientific Review Officer Center for Scientific Review National Institutes of Health 6701 Rockledge Drive, Room 1012A, MSC 7770 Bethesda, MD 20892 301–435–1721 *hfriedman@csr.nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine; 93.333, Clinical Research, 93.306, 93.333, 93.337, 93.393–93.396, 93.837–93.844, 93.846–93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated: May 7, 2020.

Melanie J. Pantoja,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2020–10124 Filed 5–11–20; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute on Deafness and Other Communication Disorders; Amended Notice of Meeting

Notice is hereby given of a change in the meeting of the Communication Disorders Review Committee, June 11, 2020, 08:00 a.m. to June 12, 2020, 05:00 p.m., Embassy Suites—Chevy Chase Pavilion, 4300 Military Road NW, Washington, DC 20015 which was published in the **Federal Register** on January 13, 2020, 85 FR 1816.

This notice is being amended to change the meeting location from in person to a virtual meeting. The meeting is closed to the public.

Dated: May 7, 2020.

Miguelina Perez,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2020–10127 Filed 5–11–20; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Eunice Kennedy Shriver National Institute of Child Health & Human Development; Notice of Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended, notice is hereby given of a meeting of the National Advisory Child Health and Human Development Council. The meeting will be held as a virtual meeting and is open to the public as indicated below.

Individuals who plan to view the virtual meeting and need special assistance or other reasonable accommodations, should notify the Contact Person listed below in advance of the meeting. The meeting will be videocast and access instructions can be found at *https://www.nichd.nih.gov/about/advisory/nachhd/virtual-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/contract proposals 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 Advisory Child Health and Human Development Council.

Date: June 11, 2020.

Open: 10:30 a.m. to 12:30 p.m.

Agenda: The agenda will include opening remarks, administrative matters, Director's Report, Division of Extramural Research Report and, other business of the Council.

Place: National Institutes of Health (Teleconference), 6710B, Rockledge Dr, Bethesda, MD 21157.

Closed: 1:00 p.m. to 5:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health (Teleconference), 6710B, Rockledge Dr, Bethesda, MD 21157.

Contact Person: Robert Borie, Committee Management Specialist, Eunice Kennedy Shriver National Institute of Child Health, and Human Development, NIH, 6710B Rockledge Drive, 2221A, Bethesda, MD 20892, 301.827.6244, *robert.borie@nih.gov.*

Any interested person may file written comments with the committee by forwarding the statement to the Contact Person listed on this notice. The statement should include the name, address, telephone number and when applicable, the business or professional affiliation of the interested person. Individuals will be able to view the meeting via NIH Videocast. Select the following link for Videocast access instructions: *https://www.nichd.nih.gov/about/advisory/nachhd/virtual-meeting.* Any member of the public may submit written comments no later than 15 days after the meeting.

Information is also available on the Institute's home page: *https://www.nichd.nih.gov/about/advisory/council,* where an agenda and any additional information for the meeting will be posted when available.

(Catalogue of Federal Domestic Assistance Program Nos. 93.864, Population Research; 93.865, Research for Mothers and Children; 93.929, Center for Medical Rehabilitation Research; 93.209, Contraception and Infertility Loan Repayment Program, National Institutes of Health, HHS)

Dated: May 6, 2020.

Ronald J. Livingston, Jr.,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2020–10052 Filed 5–11–20; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Neurological Disorders and Stroke; Amended Notice of Meeting

Notice is hereby given of a change in the meeting of the Board of Scientific Counselors, National Institute of Neurological Disorders and Stroke, June 21, 2020, 06:00 p.m. to June 23, 2020, 12:00 p.m., National Institutes of Health, Bethesda, MD, 20814 which was published in the **Federal Register** on November 15, 2019, 84FR62543.

This meeting notice is amended to change the meeting format from in-person to video assisted meeting. The meeting is closed to the public.

Dated: May 7, 2020.

Tyeshia M. Roberson,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2020–10133 Filed 5–11–20; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute of Allergy and Infectious Diseases; Notice of Closed Meeting

Pursuant to section 10(d) 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 of Allergy and Infectious Diseases Special Emphasis Panel; HIV/AIDS Clinical Trials Units (UM1 Clinical Trial Required).

Date: June 4, 2020.

Time: 10:00 a.m. to 6:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institute of Allergy and Infectious Diseases, National Institutes of Health, 5601 Fishers Lane, Room 3G21A, Rockville, MD 20892 (Telephone Conference Call).

Contact Person: Roberta Binder, Ph.D., Scientific Review Officer, Scientific Review Program, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, National Institutes of Health, 5601 Fishers Lane, Room 3G21A, Bethesda, MD 20892–9823, (240) 669–5050, *rbinder@niaid.nih.gov.*

(Catalogue of Federal Domestic Assistance Program Nos. 93.855, Allergy, Immunology, and Transplantation Research; 93.856, Microbiology and Infectious Diseases Research, National Institutes of Health, HHS)

Dated: May 7, 2020.

Tyeshia M. Roberson,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2020–10125 Filed 5–11–20; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center for Scientific Review; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended, notice is hereby given of the following meetings.

The meetings 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: Center for Scientific Review Special Emphasis Panel; Molecular and Cellular Endocrinology.

Date: June 5, 2020.

Time: 9:00 a.m. to 10:00 a.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Elaine Sierra-Rivera, Ph.D., Scientific Review Officer, EMNR IRG, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6182 MSC 7892, Bethesda, MD 20892, (301) 435–2514, *riverase@csr.nih.gov.*

Name of Committee: Musculoskeletal, Oral and Skin Sciences Integrated Review Group; Musculoskeletal Rehabilitation Sciences Study Section.

Date: June 9–10, 2020.

Time: 2:00 p.m. to 7:00 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).

Contact Person: Maria Nurminskaya, Ph.D., Scientific Review Officer, Center for

Scientific Review, National Institutes of Health, Bethesda, MD 20892, (301) 435–1222, *nurminskayam@csr.nih.gov*.

Name of Committee: Biological Chemistry and Macromolecular Biophysics Integrated Review Group; Macromolecular Structure and Function D Study Section.
Date: June 10, 2020.
Time: 9:00 a.m. to 6:30 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: James W. Mack, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4154, MSC 7806, Bethesda, MD 20892, (301) 435–2037, *mackj2@csr.nih.gov*.

Name of Committee: Center for Scientific Review Special Emphasis Panel; PAR Panel: Cellular and Molecular Biology of Complex Brain Disorders.
Date: June 11–12, 2020.
Time: 8:00 a.m. to 6:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Afia Sultana, Ph.D., Scientific Review Officer, National Institutes of Health, Center for Scientific Review, 6701 Rockledge Drive, Room 4189, Bethesda, MD 20892, (301) 827–7083, *sultanaa@mail.nih.gov*.

Name of Committee: Biological Chemistry and Macromolecular Biophysics Integrated Review Group; Synthetic and Biological Chemistry B Study Section.
Date: June 11–12, 2020.
Time: 9:00 a.m. to 6:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Michael Eissenstat, Ph.D., Scientific Review Officer, BCMB IRG, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4166, MSC 7806, Bethesda, MD 20892, (301) 435–1722, *eissenstatma@csr.nih.gov*.

Name of Committee: Infectious Diseases and Microbiology Integrated Review Group; Clinical Research and Field Studies of Infectious Diseases Study Section.
Date: June 11–12, 2020.
Time: 9:00 a.m. to 7:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Soheyla Saadi, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3211, MSC 7808, Bethesda, MD 20892, (301) 435–0903, *saadisoh@csr.nih.gov*.

Name of Committee: Brain Disorders and Clinical Neuroscience Integrated Review Group; Clinical Neuroimmunology and Brain Tumors Study Section.
Date: June 11–12, 2020.
Time: 9:00 a.m. to 7:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Aleksey Gregory Kazantsev, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5201, Bethesda, MD 20817, (301) 435–1042, *aleksey.kazantsev@nih.gov*.

Name of Committee: Oncology 2—Translational Clinical Integrated Review Group; Cancer Biomarkers Study Section.
Date: June 15–16, 2020.
Time: 8:00 a.m. to 6:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Lawrence Ka-Yun Ng, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6152, MSC 7804, Bethesda, MD 20892, 301–357–9318, *ngkl@csr.nih.gov*.

Name of Committee: Healthcare Delivery and Methodologies Integrated Review Group; Community-Level Health Promotion Study Section.
Date: June 15–16, 2020.
Time: 8:00 a.m. to 6:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Ping Wu, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3166, Bethesda, MD 20892, (301) 451–8428, *wup4@csr.nih.gov*.

Name of Committee: Musculoskeletal, Oral and Skin Sciences Integrated Review Group; Musculoskeletal Tissue Engineering Study Section.
Date: June 15–16, 2020.
Time: 8:00 a.m. to 5:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Baljit S Moonga, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4214, MSC 7806, Bethesda, MD 20892, (301) 435–1777, *moongabs@mail.nih.gov*.

Name of Committee: Molecular, Cellular and Developmental Neuroscience Integrated Review Group; Cellular and Molecular Biology of Neurodegeneration Study Section.
Date: June 15–16, 2020.
Time: 8:30 a.m. to 4:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Laurent Taupenot, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4188, MSC 7850, Bethesda, MD 20892, (301) 435–1203, *laurent.taupenot@nih.gov*.

Name of Committee: Infectious Diseases and Microbiology Integrated Review Group; Vector Biology Study Section.
Date: June 15–16, 2020.
Time: 9:30 a.m. to 5:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Liangbiao Zheng, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3214, MSC 7808, Bethesda, MD 20892, (301) 402–5671, *zhengli@csr.nih.gov*.

Name of Committee: Center for Scientific Review Special Emphasis Panel; PAR Panel: Mammalian Models for Translation Research.
Date: June 15, 2020.
Time: 10:00 a.m. to 6:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Syed M Quadri, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6210, MSC 7804, Bethesda, MD 20892, (301) 435–1211, *quadris@csr.nih.gov*.

Name of Committee: Center for Scientific Review Special Emphasis Panel; PAR Panel: Mammalian Models for Translation Research.
Date: June 15, 2020.
Time: 10:00 a.m. to 6:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Malaya Chatterjee, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6192, MSC 7804, Bethesda, MD 20892, (301) 806–2515, *chatterm@csr.nih.gov*.

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine; 93.333, Clinical Research, 93.306, 93.333, 93.337, 93.393–93.396, 93.837–93.844, 93.846–93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated: May 7, 2020.

Miguelina Perez,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2020–10123 Filed 5–11–20; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Center for Scientific Review; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended, notice is hereby given of the following meetings.

The meetings 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: Center for Scientific Review Special Emphasis Panel RFA–RM–20–001: Transformative Technology Development for the Human Biomolecular Atlas Program (UG3/UH3).
Date: June 9, 2020.
Time: 9:00 a.m. to 5:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Lystranne Alysia Maynard Smith, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892, 301–402–4809, *lystranne.maynard-smith@nih.gov*.

Name of Committee: Cardiovascular and Respiratory Sciences Integrated Review Group Electrical Signaling, Ion Transport, and Arrhythmias Study Section.
Date: June 10, 2020.
Time: 11:00 a.m. to 6:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Sara Ahlgren, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, RM 4136, Bethesda, MD 20892, 301–435–0904, *sara.ahlgren@nih.gov*.

Name of Committee: Musculoskeletal, Oral and Skin Sciences Integrated Review Group Skeletal Muscle and Exercise Physiology Study Section.
Date: June 11–12, 2020.
Time: 8:00 a.m. to 5:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Richard Ingraham, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4116, MSC 7814, Bethesda, MD 20892, 301–496–8551, *ingrahamrh@mail.nih.gov*.

Name of Committee: Risk, Prevention and Health Behavior Integrated Review Group Behavioral Medicine, Interventions and Outcomes Study Section.
Date: June 11–12, 2020.
Time: 9:00 a.m. to 5:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Lee S Mann, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3224, MSC 7808, Bethesda, MD 20892, 301–435–0677, *mannl@csr.nih.gov*.

Name of Committee: Center for Scientific Review Special Emphasis Panel Ocular Surface, Cornea, Anterior Segment Glaucoma and Refractive Error.
Date: June 11–12, 2020.
Time: 9:30 a.m. to 7:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, 6701 Rockledge Drive, Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Julius Cinque, MS, Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 5186, MSC 7846, Bethesda, MD 20892, *cinquej@csr.nih.gov*.

Name of Committee: Cardiovascular and Respiratory Sciences Integrated Review Group; Cardiovascular Differentiation and Development Study Section.
Date: June 11, 2020.
Time: 11:00 a.m. to 7:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Sara Ahlgren, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, RM 4136, Bethesda, MD 20817–7814, 301–435–0904, *sara.ahlgren@nih.gov*.

Name of Committee: Oncology 1-Basic Translational Integrated Review Group; Molecular Oncogenesis Study Section.
Date: June 16–17, 2020.
Time: 9:00 a.m. to 5:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Nywana Sizemore, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 6204, MSC 7804, Bethesda, MD 20892, 301–435–1718, *sizemoren@csr.nih.gov*.

Name of Committee: Center for Scientific Review Special Emphasis Panel; Topics in Bacterial Pathogenesis.
Date: June 16, 2020.
Time: 10:00 a.m. to 6:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Richard G Kostriken, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 3192, MSC 7808, Bethesda, MD 20892, 240–519–7808, *kostrikr@csr.nih.gov*.

Name of Committee: Center for Scientific Review Special Emphasis Panel; R15 NIH Research Enhancement Award (AREA and REAP) Review.
Date: June 16, 2020.
Time: 1:00 p.m. to 4:00 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health, Rockledge II, 6701 Rockledge Dr., Bethesda, MD 20892 (Virtual Meeting).
Contact Person: Ola Mae Zack Howard, Ph.D., Scientific Review Officer, Center for Scientific Review, National Institutes of Health, 6701 Rockledge Drive, Room 4192, MSC 7806, Bethesda, MD 20892, 301–451–4467, *howardz@mail.nih.gov*.

(Catalogue of Federal Domestic Assistance Program Nos. 93.306, Comparative Medicine; 93.333, Clinical Research, 93.306, 93.333, 93.337, 93.393–93.396, 93.837–93.844, 93.846–93.878, 93.892, 93.893, National Institutes of Health, HHS)

Dated: May 6, 2020.

Ronald J. Livingston, Jr.,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2020–10050 Filed 5–11–20; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute on Drug Abuse; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended, notice is hereby given of the following meetings.

The meetings 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/contract proposals 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/contract proposals, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute on Drug Abuse Special Emphasis Panel;

Exploring Epigenomic or Non-Coding RNA Regulation in the Development, Maintenance or Treatment of Chronic Pain (R61/R33).

Date: May 27, 2020.

Time: 12:00 p.m. to 1:30 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institute on Drug Abuse, NIH, Neurosciences Center Building, 6001 Executive Boulevard, Rockville, MD 20852 (Telephone Conference Call).

Contact Person: Ipolia R. Ramadan, Ph.D., Scientific Review Officer, Office of Extramural Policy And Review, Division of Extramural Research, National Institute on Drug Abuse, NIH, 6001 Executive Boulevard, Room 4228, MSC 9550, Bethesda, MD 20892, (301) 827–4471, *ramadanir@mail.nih.gov*.

Name of Committee: National Institute on Drug Abuse Special Emphasis Panel; Contract Review for ''Clinical Research Coordinating Center for NIDA's Clinical Trials Network.''

Date: June 4, 2020.

Time: 12:00 p.m. to 2:00 p.m.

Agenda: To review and evaluate contract proposals.

Place: National Institute on Drug Abuse, NIH, Neurosciences Center Building, 6001 Executive Boulevard, Rockville, MD 20852 (Telephone Conference Call).

Contact Person: Hiromi Ono, Ph.D., Scientific Review Officer, Office of Extramural Affairs, Division of Extramural Research, National Institute on Drug Abuse, NIH, 6001 Executive Boulevard, Room 4238, MSC 9550, Bethesda, MD 20892, (301) 402–6020, *hiromi.ono@nih.gov*.

(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: May 7, 2020.

Tyeshia M. Roberson,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2020–10126 Filed 5–11–20; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2020–0002]

Changes in Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: New or modified Base (1-percent annual chance) Flood Elevations (BFEs), base flood depths, Special Flood Hazard Area (SFHA) boundaries or zone designations, and/or regulatory floodways (hereinafter referred to as flood hazard determinations) as shown on the indicated Letter of Map Revision (LOMR) for each of the communities listed in the table below are finalized. Each LOMR revises the Flood Insurance Rate Maps (FIRMs), and in some cases the Flood Insurance Study (FIS) reports, currently in effect for the listed communities. The flood hazard determinations modified by each LOMR will be used to calculate flood insurance premium rates for new buildings and their contents.

DATES: Each LOMR was finalized as in the table below.

ADDRESSES: Each LOMR is available for inspection at both the respective Community Map Repository address listed in the table below and online through the FEMA Map Service Center at *https://msc.fema.gov.*

FOR FURTHER INFORMATION CONTACT: Rick Sacbibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) *patrick.sacbibit@fema.dhs.gov;* or visit the FEMA Mapping and Information eXchange (FMIX) online at *https://www.floodmaps.fema.gov/fhm/fmx_main.html.*

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA) makes the final flood hazard determinations as shown in the LOMRs for each community listed in the table below. Notice of these modified flood hazard determinations has been published in newspapers of local circulation and 90 days have elapsed since that publication. The Deputy Associate Administrator for Insurance and Mitigation has resolved any appeals resulting from this notification.

The modified flood hazard determinations are made pursuant to section 206 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4105, and are in accordance with the National Flood Insurance Act of 1968, 42 U.S.C. 4001 *et seq.,* and with 44 CFR part 65.

For rating purposes, the currently effective community number is shown and must be used for all new policies and renewals.

The new or modified flood hazard information is the basis for the floodplain management measures that the community is required either to adopt or to show evidence of being already in effect in order to remain qualified for participation in the National Flood Insurance Program (NFIP).

This new or modified flood hazard information, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities.

This new or modified flood hazard determinations are used to meet the floodplain management requirements of the NFIP and are used to calculate the appropriate flood insurance premium rates for new buildings, and for the contents in those buildings. The changes in flood hazard determinations are in accordance with 44 CFR 65.4.

Interested lessees and owners of real property are encouraged to review the final flood hazard information available at the address cited below for each community or online through the FEMA Map Service Center at *https://msc.fema.gov.*

(Catalog of Federal Domestic Assistance No. 97.022, ''Flood Insurance.'')

Michael M. Grimm,

Assistant Administrator for Risk Management, Department of Homeland Security, Federal Emergency Management Agency.

State and county	Location and case No.	Chief executive officer of community	Community map repository	Date of modification	Community No.
Arkansas:					
Pulaski (FEMA Docket No.: B–2006).	City of Little Rock (19–06–2539P).	The Honorable Frank D. Scott, Jr., Mayor, City of Little Rock, 500 West Markham Street, Room 203, Little Rock, AR 72201.	Public Works Department, 701 West Markham Street, Little Rock, AR 72201.	Apr. 13, 2020	050181
Pulaski (FEMA Docket No.: B–2006).	Unincorporated areas of Pulaski County (19–06–2539P).	The Honorable Barry Hyde, Pulaski County Judge, 201 South Broadway Street, Suite 400, Little Rock, AR 72201.	Pulaski County Public Works Department, 3200 Brown Street, Little Rock, AR 72204.	Apr. 13, 2020	050179
Colorado:					
Boulder (FEMA Docket No.: B–1981).	City of Lafayette (19–08–0592P).	The Honorable Alexandra Lynch, Mayor, City of Lafayette, 1290 South Public Road, Lafayette, CO 80026.	Planning Department, 1290 South Public Road, Lafayette, CO 80026.	Mar. 27, 2020	080026
Boulder (FEMA Docket No.: B–1981).	Unincorporated areas of Boulder County (19–08–0592P).	The Honorable Elise Jones, Chair, Boulder County Board of Commissioners, P.O. Box 471, Boulder, CO 80306.	Boulder County Transportation Department, 2525 13th Street, Suite 203, Boulder, CO 80304.	Mar. 27, 2020	080023
Broomfield (FEMA Docket No.: B–1981).	City and County of Broomfield (19–08–0592P).	The Honorable Randy Ahrens, Mayor, City and County of Broomfield, 1 Descombes Drive, Broomfield, CO 80020.	Engineering Department, 1 Descombes Drive, Broomfield, CO 80020.	Mar. 27, 2020	085073
Connecticut: Fairfield (FEMA Docket No.: B–2008).	City of Stamford (19–01–1380P).	The Honorable David Martin, Mayor, City of Stamford, 888 Washington Boulevard, Stamford, CT 06901.	City Hall, 888 Washington Boulevard, Stamford, CT 06901.	Apr. 13, 2020	090015
Florida:					
Charlotte (FEMA Docket No.: B–1981).	Unincorporated areas of Charlotte County (19–04–1634P).	The Honorable Ken Doherty, Chairman, Charlotte County Board of Commissioners, 18500 Murdock Circle, Suite 536, Port Charlotte, FL 33948.	Charlotte County Community Development Department, 18500 Murdock Circle, Port Charlotte, FL 33948.	Apr. 6, 2020	120061
Miami-Dade (FEMA Docket No.: B–2006).	City of Doral (19–04–4177P).	The Honorable Juan Carlos Bermudez, Mayor, City of Doral, 8401 Northwest 53rd Terrace, Doral, FL 33166.	City Hall, 8401 Northwest 53rd Terrace, Doral, FL 33166.	Apr. 10, 2020	120041
Monroe (FEMA Docket No.: B–2006).	Unincorporated areas of Monroe County (19–04–6355P).	The Honorable Sylvia Murphy, Mayor, Monroe County Board of Commissioners, 102050 Overseas Highway, Suite 234, Key Largo, FL 33037.	Monroe County Building Department, 2798 Overseas Highway, Suite 300, Marathon, FL 33050.	Apr. 7, 2020	125129
Georgia: Bryan (FEMA Docket No.: B–1981).	Unincorporated areas of Bryan County (19–04–2627P).	The Honorable Carter Infinger, Chairman, Bryan County Board of Commissioners, 51 North Courthouse Street, Pembroke, GA 31321.	Bryan County Engineering Department, 66 Captain Matthew Freeman Drive, Richmond Hill, GA 31324.	Apr. 3, 2020	130016
Kentucky: Fayette (FEMA Docket No.: B–2006).	Lexington-Fayette Urban County Government (19–04–1650P).	The Honorable Linda Gorton, Mayor, Lexington-Fayette Urban County Government, 200 East Main Street, Lexington, KY 40507.	Lexington-Fayette Urban County Government Planning Division, 101 East Vine Street, 4th Floor, Lexington, KY 40502.	Mar. 31, 2020	210067
Massachusetts: Essex (FEMA Docket No.: B–2006).	City of Gloucester (19–01–1679P).	The Honorable Sefatia Romeo Theken, Mayor, City of Gloucester, 9 Dale Avenue, Gloucester, MA 01930.	City Hall, 3 Pond Road, Gloucester, MA 01930.	Apr. 6, 2020	250082
Mississippi: Lafayette (FEMA Docket No.: B–2006).	City of Oxford (19–04–0963P).	The Honorable Robyn Tannehill, Mayor, City of Oxford, 107 Courthouse Square, Oxford, MS 38655.	City Courthouse, 107 Courthouse Square, Oxford, MS 38655.	Mar. 25, 2020	280094
North Carolina: Guilford (FEMA Docket No.: B–2008).	City of High Point (19–04–4081P).	The Honorable Jay W. Wagner, Mayor, City of High Point, P.O. Box 230, High Point, NC 27261.	City Hall, 211 South Hamilton Street, High Point, NC 27261.	Apr. 17, 2020	370113
Oklahoma: Canadian (FEMA Docket No.: B–2008).	City of Oklahoma City (19–06–3335P).	The Honorable David Holt, Mayor, City of Oklahoma City, 200 North Walker Avenue, Oklahoma City, OK 73102.	Department of Public Works, 420 West Main Street, Suite 700, Oklahoma City, OK 73102.	Apr. 7, 2020	405378
Texas:					
Bexar (FEMA Docket No.: B–2006).	City of San Antonio (19–06–0009P).	The Honorable Ron Nirenberg, Mayor, City of San Antonio, P.O. Box 839966, San Antonio, TX 78283.	Transportation and Capital Improvements Department, Storm Water Division, 1901 South Alamo Street, 2nd Floor, San Antonio, TX 78204.	Mar. 30, 2020	480045
Bexar (FEMA Docket No.: B–2016).	City of San Antonio (19–06–3807P).	The Honorable Ron Nirenberg, Mayor, City of San Antonio, P.O. Box 839966, San Antonio, TX 78283.	Transportation and Capitol Improvements Department, Storm Water Division, 114 West Commerce Street, 7th Floor, San Antonio, TX 78205.	Apr. 13, 2020	480045
Bexar (FEMA Docket No.: B–2016).	Unincorporated areas of Bexar County (19–06–3807P).	The Honorable Nelson W. Wolff, Bexar County Judge, 101 West Nueva Street, 10th Floor, San Antonio, TX 78205.	Bexar County Public Works Department, 1948 Probandt Street, San Antonio, TX 78214.	Apr. 13, 2020	480035
Collin (FEMA Docket No.: B–2006).	City of Allen (19–06–2793P).	The Honorable Stephen Terrell, Mayor, City of Allen, 305 Century Parkway, 1st Floor, Allen, TX 75013.	City Hall, 305 Century Parkway, Allen, TX 75013.	Apr. 10, 2020	480131

State and county	Location and case No.	Chief executive officer of community	Community map repository	Date of modification	Community No.
Collin (FEMA Docket No.: B–2006).	City of Plano (19–06–1989P).	The Honorable Harry LaRosiliere, Mayor, City of Plano, 1520 K Avenue, Suite 300, Plano, TX 75074.	Department of Engineering, 1520 K Avenue, Suite 250, Plano, TX 75074.	Apr. 3, 2020	480140
Denton (FEMA Docket No.: B–2006).	City of Fort Worth (20–06–0236P).	The Honorable Betsy Price, Mayor, City of Fort Worth, 200 Texas Street, Fort Worth, TX 76102.	Transportation and Public Works Department, 200 Texas Street, Fort Worth, TX 76102.	Mar. 31, 2020	480596
Denton (FEMA Docket No.: B–2006).	City of Highland Village (19–06–1117P).	The Honorable Charlotte Wilcox, Mayor, City of Highland Village, 1000 Highland Village Road, Highland Village, TX 75077.	City Hall, 1000 Highland Village Road, Highland Village, TX 75077.	Apr. 10, 2020	481105
Denton (FEMA Docket No.: B–2006).	Town of Copper Canyon (19–06–1117P).	The Honorable Ron Robertson, Mayor, Town of Copper Canyon, 400 Woodland Drive, Copper Canyon, TX 75077.	Town Hall, 400 Woodland Drive, Copper Canyon, TX 75077.	Apr. 10, 2020	481508
Denton (FEMA Docket No.: B–2006).	Unincorporated areas of Denton County (20–06–0236P).	The Honorable Andy Eads, Denton County Judge, 110 West Hickory Street, 2nd Floor, Denton, TX 76201.	Denton County Transportation and Public Works Department, 1505 East McKinney Street, Suite 175, Denton, TX 76209.	Mar. 31, 2020	480774
Harris (FEMA Docket No.: B–2006).	Unincorporated areas of Harris County (19–06–1720P).	The Honorable Lina Hidalgo, Harris County Judge, 1001 Preston Street, Suite 911, Houston, TX 77002.	Harris County Permit Office, 10555 Northwest Freeway, Suite 120, Houston, TX 77092.	Apr. 6, 2020	480287
Tarrant (FEMA Docket No.: B–2006).	City of Fort Worth (19–06–3050P).	The Honorable Betsy Price, Mayor, City of Fort Worth, 200 Texas Street, Fort Worth, TX 76102.	Transportation and Public Works Department, 200 Texas Street, Fort Worth, TX 76102.	Apr. 2, 2020	480596
Virginia:					
Charlotte (FEMA Docket No.: B–1981).	Town of Drakes Branch (19–03–0477P).	The Honorable Denise L. Pridgen, Mayor, Town of Drakes Branch, P.O. Box 191, Drakes Branch, VA 23937.	Town Hall, 4800 Drakes Main Street, Drakes Branch, VA 23937.	Apr. 14, 2020	510032
Independent City (FEMA Docket No.: B–2006).	City of Harrisonburg (19–03–1517P).	The Honorable Deanna R. Reed, Mayor, City of Harrisonburg, 409 South Main Street, Harrisonburg, VA 22801.	City Hall, 409 South Main Street, Harrisonburg, VA 22801.	Mar. 26, 2020	510076
Loudoun (FEMA Docket No.: B–2006).	Town of Leesburg (20–03–0036P).	The Honorable Kelly Burk, Mayor, Town of Leesburg, 25 West Market Street, Leesburg, VA 20176.	Town Hall, 25 West Market Street, Leesburg, VA 20176.	Apr. 13, 2020	510091

[FR Doc. 2020–10103 Filed 5–11–20; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2020–0002; Internal Agency Docket No. FEMA–B–2019]

Proposed Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency; DHS.

ACTION: Notice; correction.

SUMMARY: On April 22, 2020, FEMA published in the **Federal Register** a proposed flood hazard determination notice that contained an erroneous table. This notice provides corrections to that table, to be used in lieu of the information published at 78 FR 22436–22438. The table provided here represents the proposed flood hazard determinations and communities affected for Ottawa County, MI (All Jurisdictions).

DATES: Comments are to be submitted on or before August 10, 2020.

ADDRESSES: The Preliminary Flood Insurance Rate Map (FIRM), and where applicable, the Flood Insurance Study (FIS) report for each community are available for inspection at both the online location and the respective Community Map Repository address listed in the table below. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at *https://msc.fema.gov* for comparison.

You may submit comments, identified by Docket No. FEMA–B–2019, to Rick Sacbibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) *patrick.sacbibit@fema.dhs.gov.*

FOR FURTHER INFORMATION CONTACT: Rick Sacbibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) *patrick.sacbibit@fema.dhs.gov;* or visit the FEMA Mapping and Insurance eXchange (FMIX) online at *https://www.floodmaps.fema.gov/fhm/fmx_main.html.*

SUPPLEMENTARY INFORMATION: FEMA proposes to make flood hazard determinations for each community listed in the table below, in accordance with Section 110 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4104, and 44 CFR 67.4(a).

These proposed flood hazard determinations, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own, or pursuant to policies established by other Federal, State, or regional entities. These flood hazard determinations are used to meet the floodplain management requirements of the NFIP and are also used to calculate the appropriate flood insurance premium rates for new buildings built after the FIRM and FIS report become effective.

Use of a Scientific Resolution Panel (SRP) is available to communities in support of the appeal resolution process. SRPs are independent panels of experts in hydrology, hydraulics, and other pertinent sciences established to review conflicting scientific and

technical data and provide recommendations for resolution. Use of the SRP may only be exercised after FEMA and local communities have been engaged in a collaborative consultation process for at least 60 days without a mutually acceptable resolution of an appeal. Additional information regarding the SRP process can be found online at *https://floodsrp.org/pdfs/srp_fact_sheet.pdf.*

The communities affected by the flood hazard determinations are provided in the table below. Any request for reconsideration of the revised flood hazard determinations shown on the Preliminary FIRM and FIS report that satisfies the data requirements outlined in 44 CFR 67.6(b) is considered an appeal. Comments unrelated to the flood hazard determinations will also be considered before the FIRM and FIS report are made final.

Correction

In the proposed flood hazard determination notice published at 78 FR 22436–22438 in the April 22, 2020, issue of the **Federal Register**, FEMA published a table titled Ottawa County, Michigan and Incorporated Areas. This table contained inaccurate information as to the county name designation featured in the table heading.

In this document, FEMA is publishing a table containing the accurate information. The information provided below should be used in lieu of that previously published.

(Catalog of Federal Domestic Assistance No. 97.022, ''Flood Insurance.'')

Michael M. Grimm,

Assistant Administrator for Risk Management, Department of Homeland Security, Federal Emergency Management Agency.

Community	Community map repository address
Ottawa County, Michigan (All Jurisdictions) **Project: 13–05–4246S Preliminary Date: September 27, 2019**	
Charter Township of Grand Haven	Charter Township Administrative Offices, 13300 168th Avenue, Grand Haven, MI 49417.
Charter Township of Holland	Charter Township Office, 353 North 120th Avenue, Holland, MI 49424.
City of Ferrysburg	City Hall, 17290 Roosevelt Road, Ferrysburg, MI 49409.
City of Grand Haven	City Hall, 519 Washington Avenue, Grand Haven, MI 49417.
City of Holland	City Hall, 270 South River Avenue, Holland, MI 49423.
Township of Olive	Olive Township Office, 6480 136th Avenue, Holland, MI 49424.
Township of Park	Park Township Office, 52 152nd Avenue, Holland, MI 49424.
Township of Port Sheldon	Port Sheldon Township Hall, 16201 Port Sheldon Street, West Olive, MI 49460.
Township of Spring Lake	Township Hall, 106 South Buchanan Street, Spring Lake, MI 49456.
Village of Spring Lake	Village Hall, 102 West Savidge Street, Spring Lake, MI 49456.

[FR Doc. 2020–10098 Filed 5–11–20; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2020–0002]

Final Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: Flood hazard determinations, which may include additions or modifications of Base Flood Elevations (BFEs), base flood depths, Special Flood Hazard Area (SFHA) boundaries or zone designations, or regulatory floodways on the Flood Insurance Rate Maps (FIRMs) and where applicable, in the supporting Flood Insurance Study (FIS) reports have been made final for the communities listed in the table below.

The FIRM and FIS report are the basis of the floodplain management measures that a community is required either to adopt or to show evidence of having in effect in order to qualify or remain qualified for participation in the Federal Emergency Management Agency's (FEMA's) National Flood Insurance Program (NFIP). In addition, the FIRM and FIS report are used by insurance agents and others to calculate appropriate flood insurance premium rates for buildings and the contents of those buildings.

DATES: The date of August 19, 2020 has been established for the FIRM and, where applicable, the supporting FIS report showing the new or modified flood hazard information for each community.

ADDRESSES: The FIRM, and if applicable, the FIS report containing the final flood hazard information for each community is available for inspection at the respective Community Map Repository address listed in the tables below and will be available online through the FEMA Map Service Center at *https://msc.fema.gov* by the date indicated above.

FOR FURTHER INFORMATION CONTACT: Rick Sacbibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) *patrick.sacbibit@fema.dhs.gov;* or visit the FEMA Mapping and Insurance eXchange (FMIX) online at *https://www.floodmaps.fema.gov/fhm/fmx_main.html.*

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA) makes the final determinations listed below for the new or modified flood hazard information for each community listed. Notification of these changes has been published in newspapers of local circulation and 90 days have elapsed since that publication. The Deputy Associate Administrator for Insurance and Mitigation has resolved any appeals resulting from this notification.

This final notice is issued in accordance with section 110 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4104, and 44 CFR part 67. FEMA has developed criteria for floodplain management in floodprone areas in accordance with 44 CFR part 60.

Interested lessees and owners of real property are encouraged to review the new or revised FIRM and FIS report available at the address cited below for each community or online through the FEMA Map Service Center at *https://msc.fema.gov.*

The flood hazard determinations are made final in the watersheds and/or communities listed in the table below.

(Catalog of Federal Domestic Assistance No. 97.022, ''Flood Insurance.'')

Michael M. Grimm,

Assistant Administrator for Risk Management, Department of Homeland Security, Federal Emergency Management Agency.

Community	Community map repository address
Jackson Parish, Louisiana and Incorporated Areas Docket No.: FEMA–B–1909	
Town of Chatham	Town Hall, 1709 Oak Street, Chatham, LA 71226.
Town of Eros	Town Hall, 9890 State Highway 34, Eros, LA 71238.
Town of Jonesboro	Town Hall, 128 Allen Avenue, Jonesboro, LA 71251.
Unincorporated Areas of Jackson Parish	Jackson Parish Court House, 500 East Court Street, Room 301, Jonesboro, LA 71251.
Village of Hodge	Village Hall, 406 West Central Street, Hodge, LA 71247.
Village of North Hodge	Town Hall, 5204 Quitman Highway, North Hodge, LA 71247.
Village of Quitman	Village Hall, 8255 Quitman Highway, Quitman, LA 71268.
Winn Parish, Louisiana and Incorporated Areas Docket No.: FEMA–B–1909	
City of Winnfield	City Hall, 120 East Main Street, Winnfield, LA 71483.
Town of Tullos	Town Hall, 9887 Main Street, Tullos, LA 71479.
Unincorporated Areas of Winn Parish	Winn Parish Courthouse, 119 West Main Street, Winnfield, LA 71483.
Village of Atlanta	Village Hall, 176 Collier Street, Atlanta, LA 71404.
Village of Calvin	Village Hall, 459 Elliott Avenue, Calvin, LA 71410.
Village of Dodson	Village Hall, 205 Gresham Street, Dodson, LA 71422.
Village of Sikes	Village Hall, 212 2nd Street, Sikes, LA 71473.
King County, Washington and Incorporated Areas Docket Nos.: FEMA–B–1340, B–1356 and B–1806	
City of Auburn	City Hall Annex, Planning and Development Department, Permit Center, 1 East Main Street, 2nd Floor, Auburn, WA 98001.
City of Bellevue	City Hall, 450 110th Avenue Northeast, Bellevue, WA 98004.
City of Bothell	City Hall, 18415 101st Avenue Northeast, Bothell, WA 98011.
City of Burien	City Hall, 400 Southwest 152nd Street, Suite 300, Burien, WA 98166.
City of Des Moines	City Hall, Development Services Division, Planning & Building Department, 21630 11th Avenue South, Suite D, Des Moines, WA 98198.
City of Federal Way	City Hall, 33325 8th Avenue South, Federal Way, WA 98003.
City of Kenmore	City Hall, 18120 68th Avenue Northeast, Kenmore, WA 98028.
City of Kent	City Hall, 220 Fourth Avenue South, Kent, WA 98032.
City of Kirkland	City Hall, 123 5th Avenue, Kirkland, WA 98033.
City of Normandy Park	City Hall, 801 Southwest 174th Street, Normandy Park, WA 98166.
City of Redmond	City Hall, 15670 Northeast 85th Street, Redmond, WA 98052.
City of Renton	City Hall, 1055 South Grady Way, Renton, WA 98057.
City of Seattle	Department of Construction and Inspections, 700 5th Avenue, Suite 2000, Seattle, WA 98104.
City of Shoreline	City Hall, Planning & Community Development Department, 17500 Midvale Avenue North, Shoreline, WA 98133.
City of Tukwila	Public Works Department, 6300 Southcenter Boulevard, Tukwila, WA 98188.
City of Woodinville	City Hall, 17301 133rd Avenue Northeast, Woodinville, WA 98072.
Muckleshoot Indian Tribe	Philip Starr Building, 39015 172nd Avenue Southeast, Auburn, WA 98092.
Unincorporated Areas of King County	Department of Natural Resources and Parks, Water and Land Resources Division, 201 South Jackson Street, Suite 600, Seattle, WA 98104.

[FR Doc. 2020–10104 Filed 5–11–20; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Internal Agency Docket No. FEMA–4525–DR; Docket ID FEMA–2020–0001]

Utah; Amendment No. 1 to Notice of a Major Disaster Declaration

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: This notice amends the notice of a major disaster declaration for the State of Utah (FEMA–4525–DR), dated April 4, 2020, and related determinations.

DATES: This amendment was issued April 30, 2020.

FOR FURTHER INFORMATION CONTACT: Dean Webster, Office of Response and Recovery, Federal Emergency Management Agency, 500 C Street SW, Washington, DC 20472, (202) 646–2833.

SUPPLEMENTARY INFORMATION: The notice of a major disaster declaration for the State of Utah is hereby amended to include Individual Assistance limited to the Crisis Counseling Program for those areas determined to have been adversely affected by the event declared a major disaster by the President in his declaration of April 4, 2020.

Individual Assistance limited to the Crisis Counseling Program for all areas in the State of Utah (already designated for emergency protective measures [Category B] not authorized under other Federal statutes, including direct Federal assistance).

The following Catalog of Federal Domestic Assistance Numbers (CFDA) are to be used for reporting and drawing funds: 97.030, Community Disaster Loans; 97.031, Cora Brown Fund; 97.032, Crisis Counseling; 97.033, Disaster Legal Services; 97.034, Disaster Unemployment Assistance (DUA); 97.046, Fire Management Assistance Grant; 97.048, Disaster Housing Assistance to Individuals and Households In Presidentially Declared Disaster Areas; 97.049, Presidentially Declared Disaster Assistance—Disaster Housing Operations for Individuals and Households; 97.050 Presidentially Declared Disaster Assistance to Individuals and Households—Other Needs; 97.036, Disaster Grants—Public Assistance (Presidentially Declared Disasters); 97.039, Hazard Mitigation Grant.

Pete Gaynor,

Administrator, Federal Emergency Management Agency.

[FR Doc. 2020–10194 Filed 5–11–20; 8:45 am]

BILLING CODE 9111–23–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2020–0022]

Assistance to Firefighters Grant Program—COVID–19 Supplemental (AFG–S)

AGENCY: Federal Emergency Management Agency (FEMA), Department of Homeland Security (DHS).

ACTION: Notice of availability.

SUMMARY: On March 27, 2020, the President signed into law the Coronavirus Aid, Relief, and Economic Security Act (''CARES Act''). This bill provides $100 million for AFG–S to prevent, prepare for, and respond to coronavirus, domestically or internationally. Specifically, AFG–S funds shall be for the purchase of Personal Protective Equipment (PPE) and related supplies, including reimbursements for previously purchased PPE back to January 1, 2020. Pursuant to the Federal Fire Prevention and Control Act of 1974, as amended, the Administrator of FEMA is publishing this notice describing the AFG–S application process, deadlines, and award selection criteria. This notice explains the differences, if any, between these guidelines and those recommended by representatives of the national fire service leadership during a Criteria Development meeting, which was held April 20, 2020. The application period for the FY 2020 AFG–S Program opened on April 28, 2020, and will close on May 15, 2020, and was announced on the AFG website at: *https://www.fema.gov/welcome-assistance-firefighters-grant-program,* as well as at *www.grants.gov.*

DATES: Grant applications for AFG–S will be accepted electronically at *https://go.fema.gov,* from April 28, 2020, at 8:00 a.m. Eastern Standard Time through May 15, 2020, at 5:00 p.m. Eastern Standard Time.

ADDRESSES: Assistance to Firefighters Grant Branch, DHS/FEMA, 400 C Street SW, 3N, Washington, DC 20472–3635.

FOR FURTHER INFORMATION CONTACT: Catherine Patterson, Branch Chief, Assistance to Firefighters Grant Branch, 1–866–274–0960.

SUPPLEMENTARY INFORMATION: The FY 2020 AFG–S is a supplemental funding opportunity under the Assistance to Firefighters Grant Program (AFG). The AFG is one of three grant programs that constitute DHS/FEMA's focus on enhancing the safety of the public and firefighters with respect to fire and fire-related hazards. AFG–S accomplishes this by providing financial assistance directly to eligible fire departments, nonaffiliated emergency medical service (NAEMS) organizations, and State Fire Training Academies (SFTAs) for critical PPE and supplies needed to prevent, prepare for, and respond to the COVID–19 public health emergency. Applications for AFG–S will be submitted and processed online at *https://go.fema.gov.* Before the application period started, the FY 2020 AFG–S Notice of Funding Opportunity (NOFO) was published on the AFG website. The AFG website provides additional information and materials useful to applicants including Frequently Asked Questions. FEMA anticipates receiving 1,000–5,000 applications for AFG–S, and the ability to award approximately 1,000 grants.

Congressional Appropriations: Congress appropriated $100 million for AFG–S (Coronavirus Aid, Relief, and Economic Security (CARES) Act, Div. B (Pub. L. 116–136)). The CARES Act provides an additional amount of Federal assistance through the Assistance to Firefighters Grant Program to prevent, prepare for, and respond to coronavirus, domestically or internationally. Accordingly, the amount provided shall be for the purchase of PPE and related supplies, including reimbursements.

Allocations and Restrictions of Available Grant Funds by Organization Type:

Aggregate Cap: Awards are capped at 1 percent of the total AFG–S grant funding.

Nonaffiliated EMS (NAEMS) Organizations: Not more than 2 percent of available grant funds shall be collectively awarded to all NAEMS organization recipients.

Emergency Medical Services Providers: Not less than 3.5 percent of available grant funds shall fund emergency medical services provided by fire departments and NAEMS organizations.

State Fire Training Academies (SFTAs): Not more than 3 percent of available grant funds shall be collectively awarded to all SFTA recipients. Further, not more than $500,000 of available grant funds are eligible per applicant.

Micro Grants: The selection of the voluntary Micro Grant option (cumulative Federal funding of $3,000) for eligible activities does not impact an applicant's request or Federal participation under regional projects. Applicants who select Micro Grants as

a funding opportunity choice may still apply for a regional project. Further, at least $150,000 of the available funds will be allocated toward this applicant type.

Regional Projects: A regional application is an opportunity for a Fire Department or a NAEMS organization to act as a host and apply for funding on behalf of itself and any number of other participating AFG eligible organizations (a NAEMS organization who is a host regional applicant can only host other NAEMS organizations). Fire Departments that serve as host regional applicants can apply on behalf of other eligible fire departments and NAEMS organizations within the same application. SFTAs are not eligible to apply under the regional activity. Regional activities should achieve cost effectiveness, support regional efficiency and resilience, and benefit more than one local jurisdiction (county, parish, town, township, city, or village) directly from the activities implemented with the grant funds.

Application Evaluation Criteria

Prior to making a grant award, FEMA is required by 31 U.S.C. 3321 note, 41 U.S.C. 2313, and 2 CFR 200.205 to review information available through any Office of Management and Budget (OMB) designated repositories of government-wide eligibility qualification or financial integrity information. Therefore, application evaluation criteria may include the following risk-based considerations of the applicant: (1) Financial stability; (2) quality of management systems and ability to meet management standards; (3) history of performance in managing Federal awards; (4) reports and findings from audits; and (5) ability to effectively implement statutory, regulatory, or other requirements.

Funding priorities and criteria for evaluating AFG–S applications are established by FEMA based on the recommendations from the Criteria Development Panel (CDP). The CDP is comprised of fire service professionals that make recommendations to FEMA regarding the creation of new or the modification of previously established funding priorities, as well as developing criteria for awarding grants. The content of the NOFO reflects implementation of the CDP's recommendations with respect to the priorities and evaluation criteria for awards.

The nine major fire service organizations represented on the CDP are:

- International Association of Fire Chiefs
- International Association of Fire Fighters
- National Volunteer Fire Council
- National Fire Protection Association
- National Association of State Fire Marshals
- International Association of Arson Investigators
- International Society of Fire Service Instructors
- North American Fire Training Directors
- Congressional Fire Service Institute

Review and Selection Process

AFG applications will be reviewed through a multi-phase process. All applications will be electronically pre-scored and ranked based on how well they align with the funding priorities outlined in the NOFO. Applications with the highest pre-score rankings will then be scored competitively by (no less than three) members of the Peer Review Panel process. Applications will also be evaluated through a series of internal FEMA review processes for completeness, adherence to programmatic guidelines, technical feasibility, and anticipated effectiveness of the proposed project(s). Below is the process by which applications will be reviewed.

i. Pre-Scoring Process

The application undergoes an electronic pre-scoring process based on established program priorities listed within the NOFO and answers to activity-specific questions within the online application. Application narratives are not reviewed during pre-scoring. Request details and budget information should comply with program guidance and statutory funding limitations. The pre-score is 50 percent of the total application score.

ii. Peer Review Panel Process

Applications with the highest pre-score will undergo peer review. The peer review panel is comprised of fire service representatives recommended by CDP national organizations. The panelists assess the merits of each application based on the narrative section of the application, including the evaluation elements listed in the Narrative Evaluation Criteria below. Panelists will independently score each project within the application, discuss the merits and/or shortcomings of the application with his or her peers, and document the findings. A consensus is not required. The panel score is 50 percent of the total application score.

iii. Technical Evaluation Process

The highest ranked applications are considered within the fundable range. Applications that are in the fundable range undergo both a technical review by a subject-matter expert, as well as a FEMA AFG Branch review prior to being recommended for an award. The FEMA AFG Branch will assess the request with respect to costs, quantities, feasibility, eligibility, and recipient responsibility prior to recommending an application for award. Once the technical evaluation process is complete, the cumulative score for each application will be determined and FEMA will generate a final application ranking. FEMA will award grants based on this final ranking and the statutorily required funding limitations listed in this notice and the NOFO.

Narrative Evaluation Criteria

1. Financial Need (25 Percent)

Applicants should describe their financial need and how consistent it is with the intent of the AFG–S Program. This statement should include details describing the applicant's financial distress, such as summarized budget constraints, unsuccessful attempts to secure other funding, and proving that the financial distress is out of their control.

2. Project Description and Budget (25 Percent)

The Project Description and Budget statement should clearly explain the applicant's project objectives and its relationship to the applicant's budget and risk analysis. Applicants should link the proposed expenses to operations and safety, as well as to the completion of the project's goals. Applicants should describe how their current response capabilities are impacted by COVID–19 as well as the overall rate of COVID–19 in their community. Applicants can reference data supported by the Centers for Disease Control and Prevention (CDC) through referencing state level data from the following website *https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html.* This data will be taken into consideration when prioritizing funding.

3. Cost Benefit (25 Percent)

Applicants should describe how they plan to address the operations and personal safety needs of their organization, including cost effectiveness and sharing assets. This statement should also include details about gaining the maximum benefits from grant funding by citing reasonable or required costs, such as specific overhead and administrative costs. The applicant's request should also be

consistent with their mission and identify how funding will benefit their organization and personnel.

4. Statement of Effect on Daily Operations (25 Percent)

The Statement of Effect on Operations should explain how this funding request will enhance an organization's overall effectiveness. It should address how an award will impact the daily operations and reduce an organization's risk(s). Applicants should include how frequently the requested item(s) will be used and in what capacity. Applicants should detail whether award funding will seek reimbursement of pre-award expenses related to the acquisition of eligible PPE, acquire PPE for immediate use, or acquire PPE resources to strengthen future response capabilities. Applicants will be evaluated on the current inventory of supplies, response usage of requested supplies, and anticipated future needs (*i.e.,* actual or anticipated burn rate percentage of PPE resources).

Eligible Applicants

Fire Departments: Fire departments operating in any of the 50 States, as well as fire departments in the District of Columbia, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or any Federally-recognized Indian Tribe or Tribal organization.

A fire department is an agency or organization having a formally-recognized arrangement with a State, local, Tribal, or territorial authority (city, county, parish, fire district, township, town, or other governing body) to provide fire suppression to a population within a geographically fixed primary first due response area.

NAEMS organizations: NAEMS organizations operating in any of the 50 States, as well as the District of Columbia, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or any Federally-recognized Indian Tribe or Tribal organization.

A nonaffiliated EMS organization is an agency or organization that is a public or private nonprofit emergency medical services entity providing medical transport that is not affiliated with a hospital and does not serve a geographic area in which emergency medical services are adequately provided by a fire department.

FEMA considers the following as hospitals under the AFG–S Program:

- Clinics
- Medical centers
- Medical colleges or universities
- Infirmaries
- Surgery centers
- Any other institutions, associations, or foundations providing medical, surgical, or psychiatric care and/or treatment for the sick or injured.

State Fire Training Academies (SFTAs): An SFTA operates in any of the 50 States, as well as the District of Columbia, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of Puerto Rico. Applicants must be designated either by legislation or by a Governor's declaration as the sole fire service training agency within a State, territory, or the District of Columbia. The designated SFTA shall be the only agency/bureau/division, or entity within that State, territory, or the District of Columbia to be an eligible AFG–S SFTA applicant. SFTAs are limited to applying for activities that are directly associated with Personal Protective Equipment and supplies needed to respond to the COVID–19 public health emergency.

Cost Sharing and Maintenance of Effort

Grant recipients must share in the costs of the projects funded under this grant program as required by 15 U.S.C. 2229(k)(1) and in accordance with applicable Federal regulations at 2 CFR part 200, but they are not required to have the cost-share at the time of application nor at the time of award. However, before a grant is awarded, FEMA will contact potential awardees to determine whether the grant recipient has the funding in hand or if the grant recipient has a viable plan to obtain the funding necessary to fulfill the cost-sharing requirement.

In general, an eligible applicant seeking a grant shall agree to make available non-Federal funds equal to not less than 15 percent of the grant awarded. However, the cost share will vary as follows based on the size of the population served by the organization, with exceptions to this general requirement for entities serving smaller communities:

- Applicants that serve populations of 20,000 or less shall agree to make available non-Federal funds in an amount equal to not less than 5 percent of the grant awarded.
- Applicants serving areas with populations above 20,000, but not more than 1 million, shall agree to make available non-Federal funds in an amount equal to not less than 10 percent of the grant awarded.
- Applicants serving areas with populations above 1 million shall agree to make available non-Federal funds in an amount equal to not less than 10 percent of the grant awarded. The cost share for SFTAs will apply the requirements above based on the total population of the State.

Cost share of non-Federal cash is the only allowable recipient contribution for AFG–S activity. On a case-by-case basis, FEMA may allow recipients already owning assets acquired with non-Federal cash, to use the trade-in allowance/credit value of those assets as cash for the purpose of meeting the cost-share obligation. For FEMA to consider a trade-in allowance/credit value as cash, the allowance amount must be reasonable, and the allowance amount must be a separate entity clearly identified in the acquisition documents. In-kind cost share is not allowable for AFG–S.

In cases of demonstrated economic hardship, and at the request of the grant recipient, the Administrator of FEMA may waive or reduce certain recipient's AFG–S cost-share requirement or maintenance of expenditure requirement. FY 2020 AFG–S applicants must indicate at the time of application whether they are requesting a waiver and whether the waiver is for the cost-share requirement, maintenance of effort requirement, or both. The FEMA Administrator is required by statute to establish guidelines for determining what constitutes economic hardship. FEMA has published these guidelines at FEMA's website: *https://www.fema.gov/media-library-data/1518026897046-483d76a37022b8a581ffb7d42fa9b17e/Eco_Hardship_Waiver_FPS_SAFER_AFG_IB_FINAL.pdf.*

Prior to the start of the FY 2020 AFG–S application period, FEMA conducted applicant workshops and/or internet webinars to inform potential applicants AFG–S. In addition, FEMA provided applicants with information at the AFG website: *https://www.fema.gov/welcome-assistance-firefighters-grant-program* to help them prepare quality grant applications. The AFG Help Desk is staffed throughout the application period to assist applicants with the automated application process as well as assistance with any questions.

Applicants can reach the AFG Help Desk through a toll-free telephone number during normal business hours (1–866–274–0960) or electronic mail at *firegrants@fema.dhs.gov.*

Application Process

Organizations may submit one application per application period in each of the three AFG program activities (*e.g.,* one application for Operations and Safety, and/or a separate application to

be a Joint/Regional Project host). If an organization submits more than one application for any single AFG program activity (*e.g.,* two applications for Operations and Safety, two for Joint/Regional Project, etc.), either intentionally or unintentionally, both applications may be disqualified.

Applicants can access the grant application electronically at *https://portal.fema.gov.* The application is also accessible from the U.S. Fire Administration's website *http://www.usfa.fema.gov* and *http://www.grants.gov.* New applicants must register and establish a username and password for secure access to the grant application. Previous AFG grant applicants must use their previously established username and passwords.

Applicants must answer questions about their grant request that reflect the AFG–S funding priorities, described above. In addition, each applicant must complete a separate narrative for each project or grant activity requested. Grant applicants will also provide relevant information about their organization's characteristics, call volume, and existing organizational capabilities.

System for Award Management (SAM)

Per 2 CFR 25.200, all Federal grant applicants and recipients must register in *https://SAM.gov.* SAM is the Federal Government's System for Awards Management, and registration is free of charge. Applicants must maintain current information in SAM that is consistent with the data provided in their AFG–S grant application and in the Dun & Bradstreet (DUNS) database. FEMA may not accept any application, process any awards, and consider any payment or amendment requests, unless the applicant or grant recipient has complied with the requirements to provide a valid DUNS number and an active SAM registration. The grant applicant's banking information, EIN, organization/entity name, address, and DUNS number must match the same information provided in SAM.

Pete Gaynor,

Administrator, Federal Emergency Management Agency.

[FR Doc. 2020–10044 Filed 5–11–20; 8:45 am]

BILLING CODE 9111–64–P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2020–0016]

Meeting To Develop Pandemic Response; Voluntary Agreement

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Announcement of meeting; request for comments.

SUMMARY: The Federal Emergency Management Agency (FEMA) will convene a meeting remotely via teleconference and web conference on May 21, 2020, to develop a voluntary agreement under Section 708 of the Defense Production Act to help provide for the national defense by maximizing the effectiveness of the distribution of critical medical resources nationwide to respond to pandemics in general, and COVID–19 specifically. The meeting will be open to the public. If necessary, a second meeting will take place on May 27, 2020.

DATES: The meeting will take place on Thursday, May 21, 2020, from 2:00 to 3:30 p.m. Eastern Time (ET). Written comments for consideration at the meeting must be submitted and received by 12 p.m. ET on Wednesday, May 20, 2020. To register to make remarks during the public comment period, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section below by 12 p.m. ET on May 20, 2020.

If necessary, a second meeting will take place on Wednesday, May 27, 2020, from 2:00 to 3:30 p.m. ET.

ADDRESSES: The meeting(s) will be held via teleconference and web conference. It is recommended that attendees register with FEMA by 12:00 p.m. on May 20, 2020, by providing their name, telephone number, email address, title, and organization to the person listed in the **FOR FURTHER INFORMATION CONTACT** section below.

Reasonable accommodations are available for people with disabilities and others with access and functional needs. To request a reasonable accommodation, contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section below as soon as possible.

To facilitate public participation, members of the public are invited to provide written comments on the issues to be considered at the meeting. The ''Meeting Objectives'' section below outlines these issues. Written comments for consideration at the meeting on May 21 must be submitted and received by 12 p.m. ET on May 20, 2020, identified by Docket ID FEMA–2020–0016, and submitted by one of the following methods:

- *Federal eRulemaking Portal: http://www.regulations.gov.* Follow the instructions for submitting comments.
- *Email:* Defense Production Act Division, FEMA, *FEMA–DPA@fema.dhs.gov.*

Instructions: All submissions must include the docket ID ''FEMA–2020–0016.'' Comments received, including any personal information provided, may be posted without alteration at *http://www.regulations.gov.*

Docket: For access to the docket to read comments received by the FEMA, go to *http://www.regulations.gov,* and search for Docket ID FEMA–2020–0016.

A public comment period will be held at the FEMA meeting on May 21, 2020, from 2:00 to 3:30 p.m. ET. All speakers must limit their comments to 3 minutes. Comments should be addressed to FEMA. Any comments not related to the Meeting Objectives topics will not be considered at the meeting, which will be chaired by FEMA. To register to make remarks during the public comment period, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section below by 12:00 p.m. on May 20, 2020. If necessary, FEMA will limit the number of comments taken during the public meeting consistent with the time available, but will consider relevant and properly submitted written submissions from all interested parties.

FEMA encourages interested parties to make written submissions in advance of the meeting on May 21 and as a follow-up to one or both meetings consistent with the instructions for submitting comments stated above. Follow-up comments must be received within three (3) business days of the last meeting held in order to be considered.

FEMA will create a transcript for each meeting and will upload the transcript(s) to the docket referenced above for public viewing. No later than 9:00 a.m. ET on Friday, May 22, FEMA will upload a notice to the docket stating whether the second meeting will be held and specifying when the comment period will be closed, consistent with the paragraph immediately above.

FOR FURTHER INFORMATION CONTACT: Harold Lucie, Joint DPA Office, Federal Emergency Management Agency, 500 C Street SW, Washington, DC 20472–3184, telephone (202) 212–2900, and email *FEMA–DPA@fema.dhs.gov.*

SUPPLEMENTARY INFORMATION: Notice of the meeting(s) is provided as required

by Sec. 708(e)(3)(B) of the Defense Production Act (DPA), 50 U.S.C. 4558(e)(3)(B), and consistent with 44 CFR part 332.

The DPA authorizes the making of ''voluntary agreements and plans of action'' with, among others, representatives of industry and business to address conditions that may pose a direct threat to the national defense or its preparedness programs (50 U.S.C. 4558(c)(1)). The President's authority to facilitate voluntary agreements has been delegated to the Department of Homeland Security (DHS) generally in section 401 of Executive Order 13603,[1] ''National Defense Resources Preparedness,'' and specifically for response to the spread of COVID–19 within the United States in section 3 of Executive Order 13911,[2] ''Delegating Additional Authority Under the Defense Production Act With Respect to Health and Medical Resources To Respond to the Spread of COVID–19.'' The Secretary of Homeland Security has delegated this authority to the FEMA Administrator in DHS Delegation 09052 Rev. 00.1, ''Delegation of Defense Production Act Authority to the Administrator of the Federal Emergency Management Agency'' (Apr. 1, 2020).

The FEMA Administrator has found that, in light of the unprecedented nature of COVID–19 and subsequent response requirements, conditions exist which pose a direct threat to the national defense and its preparedness programs. A future pandemic, or resurgence of COVID–19, will similarly threaten the national defense and its preparedness programs. Therefore, FEMA has sought, and received, approval from the Attorney General, after consultation by the Attorney General with the Federal Trade Commission, to begin the consultations with representatives of manufacturers, suppliers and distributors of personal protective equipment, pharmaceuticals, and other critical health and medical resources for the purpose of making a voluntary agreement under the DPA. The purpose of such an agreement is to maximize the effectiveness of the distribution of critical health and medical resources nationwide to respond to pandemics in general, and COVID–19 specifically, by establishing unity of effort between agreement participants and the Federal Government for integrated coordination, planning, information sharing, and distribution of critical medical resources. With respect to agreement participants specifically, the agreement would establish the terms, conditions, and procedures under which participants agree voluntarily to contribute and facilitate health and medical resource production and distribution capacity as requested by FEMA and other Federal Government entities.

FEMA proposes to make a 5-year voluntary agreement effective as soon as possible to address the Nation's response to COVID–19. FEMA proposes a Committee for the Distribution of Medical Resources Necessary to Respond to a Pandemic (the ''Committee'') to provide FEMA and the participants a forum to maximize the effectiveness of the distribution of health and medical resources nationwide to respond to a pandemic through integrated coordination, planning, information sharing, and distribution of health and medical resources.

The meeting(s) will be chaired by the FEMA Administrator or his delegate, and attended by the Attorney General or his delegate, and the Chairman of the Federal Trade Commission or his delegate. In developing this agreement, FEMA will adhere to all procedural requirements of 50 U.S.C. 4558 and 44 CFR part 332 for establishment of this voluntary agreement.

Meeting Objectives: The purpose of the meeting(s) is two-fold:

(1) First, FEMA aims to identify agreement participants. FEMA proposes to invite representatives of major manufacturers, suppliers, and distributers of health and medical resources critical to respond to a pandemic. FEMA requests stakeholder input on identification of appropriate manufacturers, suppliers, distributors, and any other appropriate stakeholders for inclusion in the voluntary agreement.

(2) Second, FEMA aims to gather technical advice from meeting participants on the scope and substance of the draft agreement. FEMA proposes that voluntary agreement will include: Provision of technical advice; collective sharing of information; identification and validation of places and resources of the greatest need for medical resources; projection of future distribution demands; collective identification and resolution of allocation of scarce resources among all public and private domestic needs; sharing of vendor, manufacturer and distribution information; and inclusion of any other necessary collective actions to maximize the timely national distribution of health and medical resources necessary to respond to a pandemic. FEMA requests stakeholder evaluation of the objectives outlined above, and requests that stakeholders provide additional recommendations for objectives of the voluntary agreement.

Pete Gaynor,

Administrator, Federal Emergency Management Agency.

[FR Doc. 2020–10221 Filed 5–8–20; 11:15 am]

BILLING CODE 9111–19–P

[1] 77 FR 16651 (Mar. 22, 2012).

[2] 85 FR 18403 (Apr. 1, 2020).

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

[Docket ID FEMA–2020–0002; Internal Agency Docket No. FEMA–B–2030]

Proposed Flood Hazard Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Notice.

SUMMARY: Comments are requested on proposed flood hazard determinations, which may include additions or modifications of any Base Flood Elevation (BFE), base flood depth, Special Flood Hazard Area (SFHA) boundary or zone designation, or regulatory floodway on the Flood Insurance Rate Maps (FIRMs), and where applicable, in the supporting Flood Insurance Study (FIS) reports for the communities listed in the table below. The purpose of this notice is to seek general information and comment regarding the preliminary FIRM, and where applicable, the FIS report that the Federal Emergency Management Agency (FEMA) has provided to the affected communities. The FIRM and FIS report are the basis of the floodplain management measures that the community is required either to adopt or to show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP). In addition, the FIRM and FIS report, once effective, will be used by insurance agents and others to calculate appropriate flood insurance premium rates for new buildings and the contents of those buildings.

DATES: Comments are to be submitted on or before August 10, 2020.

ADDRESSES: The Preliminary FIRM, and where applicable, the FIS report for each community are available for inspection at both the online location *https://www.fema.gov/preliminary floodhazarddata* and the respective Community Map Repository address listed in the tables below. Additionally,

the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at *https://msc.fema.gov* for comparison.

You may submit comments, identified by Docket No. FEMA–B–2030, to Rick Sacbibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) *patrick.sacbibit@fema.dhs.gov.*

FOR FURTHER INFORMATION CONTACT: Rick Sacbibit, Chief, Engineering Services Branch, Federal Insurance and Mitigation Administration, FEMA, 400 C Street SW, Washington, DC 20472, (202) 646–7659, or (email) *patrick.sacbibit@fema.dhs.gov;* or visit the FEMA Mapping and Insurance eXchange (FMIX) online at *https://www.floodmaps.fema.gov/fhm/fmx_main.html.*

SUPPLEMENTARY INFORMATION: FEMA proposes to make flood hazard determinations for each community listed below, in accordance with section 110 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4104, and 44 CFR 67.4(a).

These proposed flood hazard determinations, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or pursuant to policies established by other Federal, State, or regional entities. These flood hazard determinations are used to meet the floodplain management requirements of the NFIP and are used to calculate the appropriate flood insurance premium rates for new buildings built after the FIRM and FIS report become effective.

The communities affected by the flood hazard determinations are provided in the tables below. Any request for reconsideration of the revised flood hazard information shown on the Preliminary FIRM and FIS report that satisfies the data requirements outlined in 44 CFR 67.6(b) is considered an appeal. Comments unrelated to the flood hazard determinations also will be considered before the FIRM and FIS report become effective.

Use of a Scientific Resolution Panel (SRP) is available to communities in support of the appeal resolution process. SRPs are independent panels of experts in hydrology, hydraulics, and other pertinent sciences established to review conflicting scientific and technical data and provide recommendations for resolution. Use of the SRP only may be exercised after FEMA and local communities have been engaged in a collaborative consultation process for at least 60 days without a mutually acceptable resolution of an appeal. Additional information regarding the SRP process can be found online at *https://www.floodsrp.org/pdfs/srp_overview.pdf.*

The watersheds and/or communities affected are listed in the tables below. The Preliminary FIRM, and where applicable, FIS report for each community are available for inspection at both the online location *https://www.fema.gov/preliminary floodhazarddata* and the respective Community Map Repository address listed in the tables. For communities with multiple ongoing Preliminary studies, the studies can be identified by the unique project number and Preliminary FIRM date listed in the tables. Additionally, the current effective FIRM and FIS report for each community are accessible online through the FEMA Map Service Center at *https://msc.fema.gov* for comparison.

(Catalog of Federal Domestic Assistance No. 97.022, ''Flood Insurance.'')

Michael M. Grimm,

Assistant Administrator for Risk Management, Department of Homeland Security, Federal Emergency Management Agency.

Community	Community map repository address
King George County, Virginia (All Jurisdictions) **Project: 19–03–0009S Preliminary Date: December 23, 2019**	
Unincorporated Areas of King George County	King George County Community Development Department, 10459 Courthouse Drive, Suite 104, King George, VA 22485.
Northumberland County, Virginia (All Jurisdictions) **Project: 18–03–0033S Preliminary Date: December 23, 2019**	
Unincorporated Areas of Northumberland County	Northumberland County Courthouse, Building and Zoning Department, 72 Monument Place, Heathsville, VA 22473.
Stafford County, Virginia (All Jurisdictions) **Project: 18–03–0002S Preliminary Date: December 23, 2019**	
Unincorporated Areas of Stafford County	Stafford County Department of Public Works, Environmental Division, 2126 Jefferson Davis Highway, Suite 203, Stafford, VA 22554.

[FR Doc. 2020–10099 Filed 5–11–20; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF HOMELAND SECURITY

Transportation Security Administration

Revision of an Agency Information Collection Activity Under OMB Review: Security Appointment Center (SAC) Visitor Request Form and Foreign National Vetting Request

AGENCY: Transportation Security Administration, DHS.

ACTION: 30-Day notice, withdrawal.

SUMMARY: This notice serves to withdraw the previous **Federal Register** notice on this subject, published May 1, 2020 (85 FR 25469). The notice will be republished at a later date, allowing the full run of the 60-day notice, published March 4, 2020 (85 FR 12800).

Dated: May 7, 2020.

Christina A. Walsh,

TSA Paperwork Reduction Act Officer, Information Technology.

[FR Doc. 2020–10096 Filed 5–11–20; 8:45 am]

BILLING CODE 9110–05–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[FWS–R4–ES–2020–N077; FXES11140400000–178–FF04EF2000]

Receipt of Incidental Take Permit Application and Proposed Habitat Conservation Plan for the Sand Skink and Blue-Tailed Mole Skink; Polk County, FL; Categorical Exclusion

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of availability; request for comments.

SUMMARY: We, the Fish and Wildlife Service (Service), announce receipt of an application from the School Board of Polk County (applicant) for an incidental take permit (ITP) under the Endangered Species Act. The applicant requests the ITP to take the federally listed sand skink and blue-tailed mole skink incidental to construction in Polk County, Florida. We request public comment on the application, which includes the applicant's proposed habitat conservation plan (HCP), and on the Service's preliminary determination that this HCP qualifies as ''low-effect,'' categorically excluded under the National Environmental Policy Act. To make this determination, we used our environmental action statement and low-effect screening form, both of which are also available for public review.

DATES: We must receive your written comments on or before June 11, 2020.

ADDRESSES: *Obtaining Documents:* You may obtain copies of the documents by any of the following methods:

- *Telephone:* Alfredo Begazo, 772–469–4234.
- *Email: alfredo_begazo@fws.gov.*
- *U.S. mail:* Alfredo Begazo, South Florida Ecological Services Office, Attn. School Board of Polk County Permit TE68779D–0, U.S. Fish and Wildlife Service, 1339 20th Street, Vero Beach, FL 32960–3559.
- *Fax:* Alfredo Begazo, 772–562–4288, Attn: Permit number TE68779D–0.

Submitting Comments: If you wish to submit comments on any of the documents, you may do so in writing via the above email address, U.S. mail address, or fax number.

FOR FURTHER INFORMATION CONTACT: Alfredo Begazo, by U.S. mail (see **ADDRESSES**) or via phone at 772–469–4234. Individuals who are hearing impaired or speech impaired may call the Federal Relay Service at 800–877–8339 for TTY assistance.

SUPPLEMENTARY INFORMATION: We, the Fish and Wildlife Service (Service), announce receipt of an application from the School Board of Polk County (applicant) for an incidental take permit (ITP) under the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 *et seq.*). The applicant requests the ITP to take the federally listed sand skink (*Neoseps reynoldsi*) and blue-tailed mole skink (*Eumeces egregious*) (skinks) incidental to the construction of a high school in Polk County, Florida. We request public comment on the application, which includes the applicant's proposed habitat conservation plan (HCP), and on the Service's preliminary determination that this HCP qualifies as ''low-effect,'' categorically excluded under the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*). To make this determination, we used our environmental action statement and low-effect screening form, both of which are also available for public review.

Project

The applicant requests a 5-year ITP to take skinks through the conversion approximately 10.05 acres (ac) of occupied skink foraging and sheltering habitat incidental to the construction of a high school on a 60.65-ac parcel in Sections 11 and 14, Township 26 South, Range 27 East, Polk County, Florida. The applicant proposes to mitigate for take of the skinks by purchasing credits equivalent to 20.1 ac of skink-occupied habitat from a Service-approved conservation bank in Polk County. The Service would require the applicant to purchase the credits prior to engaging in any phase of the project.

Public Availability of Comments

Before including your address, phone number, email address, or other personal identifying information in your comment, be aware that your entire comment—including your personal identifying information—may be made available to the public. While you may request that we withhold your personal identifying information, we cannot guarantee that we will be able to do so.

Our Preliminary Determination

The Service has made a preliminary determination that the applicant's project, including land clearing, construction of the high school, and the proposed mitigation measure, would individually and cumulatively have a minor or negligible effect on the skinks and the environment. Therefore, we have preliminarily concluded that the ITP for this project would qualify for categorical exclusion and the HCP would be low effect under our NEPA regulations at 43 CFR 46.205 and 46.210. A low-effect HCP is one that would result in (1) minor or negligible effects on federally listed, proposed, and candidate species and their habitats; (2) minor or negligible effects on other environmental values or resources; and (3) impacts that, when considered together with the impacts of other past, present, and reasonable foreseeable similarly situated projects, would not result in significant cumulative effects to environmental values or resources over time.

Next Steps

The Service will evaluate the application and the comments to determine whether to issue the requested permit. We will also conduct an intra-Service consultation pursuant to section 7 of the ESA to evaluate the effects of the proposed take. After considering the preceding matters, we will determine whether the permit issuance criteria of section 10(a)(1)(B) of the ESA have been met. If met, the Service will issue ITP number TE68779D–0 to the School Board of Polk County for incidental take of skinks.

Authority

The Service provides this notice under section 10(c) (16 U.S.C. 1539(c))

of the ESA and NEPA regulation 40 CFR 1506.6.

Roxanna Hinzman,

Field Supervisor, South Florida Ecological Services Office.

[FR Doc. 2020–10053 Filed 5–11–20; 8:45 am]

BILLING CODE 4333–15–P

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

[201A2100DD AAKC001030 A0A501010.999 253G; OMB Control Number 1076–0177]

Agency Information Collection Activities; Tribal Energy Development Capacity Program

AGENCY: Bureau of Indian Affairs, Interior.

ACTION: Notice of information collection; request for comment.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, we, the Office of the Assistant Secretary-Indian Affairs (AS–IA) are proposing to renew an information collection.

DATES: Interested persons are invited to submit comments on or before July 13, 2020.

ADDRESSES: Send your comments on this information collection request (ICR) by mail to the Winter Jojola-Talburt, Deputy Division Chief, 13922 Denver West Parkway Suite 200, Lakewood, CO 80401; or by email to *winter.jojola-talburt@bia.gov.* Please reference Office of Management and Budget (OMB) Control Number 1076–0177 in the subject line of your comments.

FOR FURTHER INFORMATION CONTACT: To request additional information about this ICR, contact Winter Jojola-Talburt by email at *winter.jojola-talburt@bia.gov,* or by telephone at 720–407–0668. Individuals who are hearing or speech impaired may call the Federal Relay Service at 1–800–877–8339 for TTY assistance. You may also view the ICR 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. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently 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 us assess the impact of our information collection requirements and minimize the public's reporting burden. It also helps the public understand our information collection requirements and provide the requested data in the desired format.

We are especially interested in public comment addressing the following:

(1) Whether or not the collection of information is necessary for the proper performance of the functions of the agency, including whether or not the information will have practical utility;

(2) The accuracy of our estimate of the burden for this collection of information, including the validity of the methodology and assumptions used;

(3) Ways to enhance the quality, utility, and clarity of the information to be collected; and

(4) How might the agency 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 response.

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 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: The Energy Policy Act of 2005 authorizes the Secretary of the Interior to provide assistance to Indian Tribes and Tribal energy resource development organizations for energy development and appropriates funds for such projects on a year-to-year basis. *See* 25 U.S.C. 3502. When funding is available, the Office of Indian Energy and Economic Development (IEED) may solicit proposals for projects for building capacity for Tribal energy resource development on Indian land from Tribal energy resource development organizations and Indian Tribes, including Alaska Native regional and village corporations under the TEDC program. For the purposes of this program, ''Indian land'' includes: All land within the boundaries of an Indian reservation, pueblo, or rancheria; any land outside those boundaries that is held by the United States in trust for a Tribe or individual Indian or by a Tribe or individual Indian with restrictions on alienation; and land owned by an Alaska Native regional or village corporation.

Those who would like to submit a TEDC project proposal must submit an application that includes certain information and, once funding is received must submit reports on how they are using the funding. A complete application must contain the following:

- A formal signed resolution of the governing body of the Tribe or Tribal energy resource development organization demonstrating authority to apply;
- A proposal describing the planned activities and deliverable products; and
- A detailed budget estimate, including contracted personnel costs, travel estimates, data collection and analysis costs, and other expenses.

The project proposal must include the information about the Tribe or Tribal energy resource development organization sufficient to allow IEED to evaluate the proposal based on the following criteria:

(a) Energy resource potential;

(b) Applicant's energy resource development history and current status;

(c) Applicant's existing energy resource development capabilities;

(d) Demonstrated willingness of the applicant to establish and maintain an independent energy resource development business entity;

(e) Intent to develop and retain energy development capacity within the applicant's government or business entities; and

(f) Applicant commitment of staff, training, or monetary resources.

The IEED requires this information to ensure that it provides funding only to those projects that meet the goals of the TEDC and the purposes for which Congress provides the appropriations.

Title of Collection: Tribal Energy Development Capacity Program.

OMB Control Number: 1076–0177.

Form Number: None.

Type of Review: Extension of a currently approved collection.

Respondents/Affected Public: Indian Tribes and Tribal energy resource development organizations under 25 U.S.C. 3502.

Total Estimated Number of Annual Respondents: 26 per year, on average; 9 project participants each year, on average.

Total Estimated Number of Annual Responses: 26 applications per year, on average; 18 progress reports per year, on average.

Estimated Completion Time per Response: 40 hours per application; 1.5 hours per progress report.

Total Estimated Number of Annual Burden Hours: 1,067 hours (1,040 for applications and 27 for progress reports).

Respondent's Obligation: Responses required to receive a benefit.

Frequency of Collection: Once per year for applications; 2 times per year for progress reports.

Total Estimated Annual Nonhour Burden Cost: $0.

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 authority for this action is the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq*).

Elizabeth K. Appel,

Director, Office of Regulatory Affairs and Collaborative Action—Indian Affairs.

[FR Doc. 2020–10091 Filed 5–11–20; 8:45 am]

BILLING CODE 4337–15–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337–TA–1153]

Certain Bone Cements, Components Thereof and Products Containing the Same; Notice of Request for Statements on the Public Interest

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the presiding administrative law judge has issued a Final Initial Determination on Section 337 Violation and a Recommended Determination on Remedy and Bond in the above-captioned investigation. The Commission is soliciting comments on public interest issues raised by the recommended relief, should the Commission find a violation. This notice is soliciting public interest comments from the public only.

FOR FURTHER INFORMATION CONTACT: Ron Traud, 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, telephone 202–205–1810.

SUPPLEMENTARY INFORMATION: Parties are to file public interest submissions pursuant to 19 CFR 210.50(a)(4). Section 337 of the Tariff Act of 1930 provides that, if the Commission finds a violation, it shall exclude the articles concerned from the United States:

> unless, after considering the effect of such exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, and United States consumers, it finds that such articles should not be excluded from entry.

19 U.S.C. 1337(d)(1). A similar provision applies to cease and desist orders. 19 U.S.C. 1337(f)(1).

The Commission is soliciting comments on public interest issues raised by the recommended relief should the Commission find a violation, specifically: A limited exclusion order directed to copolymer trade secrets TS 1–35 for five years; A limited exclusion order directed to the other categories of accused products for two years or less; and cease and desist orders directed to the respondents.

The Commission is interested in further development of the record on the public interest in this investigation. Accordingly, members of the public are hereby invited to file submissions of no more than five (5) pages, inclusive of attachments, concerning the public interest in light of the administrative law judge's Initial Determination on Violation of Section 337 and Recommended Determination on Remedy and Bond issued in this investigation on May 6, 2020. Comments should address whether issuance of the limited exclusion orders and cease and desist orders in this investigation, should the Commission find a violation, would affect the public health and welfare in the United States, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States, or United States consumers.

In particular, the Commission is interested in comments that:

(i) Explain how the articles potentially subject to the recommended remedial orders are used in the United States;

(ii) Identify any public health, safety, or welfare concerns in the United States relating to the recommended orders;

(iii) Identify like or directly competitive articles that complainants, their licensees, or third parties make in the United States which could replace the subject articles if they were to be excluded;

(iv) Indicate whether complainants, complainants' licensees, and/or third-party suppliers have the capacity to replace the volume of articles potentially subject to the recommended orders within a commercially reasonable time; and

(v) Explain how the recommended remedial orders would impact consumers in the United States.

Written submissions must be filed no later than by close of business on June 11, 2020.

Persons filing written submissions must file the original document electronically on or before the deadlines stated above. The Commission's paper filing requirements in 19 CFR 210.4(f) are currently waived. 85 FR 15798 (March 19, 2020). Submissions should refer to the investigation number (''Inv. No. 337–TA–1153'') in a prominent place on the cover page and/or the first page. (*See Handbook for Electronic Filing Procedures, https://www.usitc.gov/documents/handbook_on_filing_procedures.pdf.*). Persons with questions regarding filing should contact the Secretary (202–205–2000).

Any person desiring to submit a document to the Commission in confidence must request confidential treatment. All such requests should be directed to the Secretary to the Commission and must include a full statement of the reasons why the Commission should grant such treatment. *See* 19 CFR 201.6. Documents for which confidential treatment by the Commission is properly sought will be treated accordingly. All information, including confidential business information and documents for which confidential treatment is properly sought, submitted to the Commission for purposes of this Investigation may be disclosed to and used: (i) By the Commission, its employees and Offices, and contract personnel (a) for developing or maintaining the records of this or a related proceeding, or (b) in internal investigations, audits, reviews, and evaluations relating to the programs, personnel, and operations of the Commission including under 5 U.S.C. Appendix 3; or (ii) by U.S. government employees and contract personnel, solely for cybersecurity purposes. All contract personnel will sign appropriate nondisclosure agreements. All non-confidential written submissions will be available for public inspection at the Office of the Secretary and on EDIS.

This action is taken under the authority of 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: May 7, 2020.

Lisa Barton,

Secretary to the Commission.

[FR Doc. 2020–10132 Filed 5–11–20; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF LABOR

Employment and Training Administration

Agency Information Collection Activities; Comment Request

ACTION: Notice.

SUMMARY: The Department of Labor's (DOL) Employment and Training Administration (ETA) is soliciting comments concerning a proposed extension for the authority to conduct the information collection request (ICR) titled, ''Alien Claims Activities Report.'' This comment request is part of continuing Departmental efforts to reduce paperwork and respondent burden in accordance with the Paperwork Reduction Act of 1995 (PRA).

DATES: Consideration will be given to all written comments received by July 13, 2020.

ADDRESSES: A copy of this ICR with applicable supporting documentation, including a description of the likely respondents, proposed frequency of response, and estimated total burden, may be obtained free by contacting Anthony Vigliotti by telephone at 202–693–3066 (this is not a toll-free number), TTY 1–877–889–5627 (this is not a toll-free number), or by email at *Vigliotti.Anthony.A@dol.gov.*

Submit written comments about, or requests for a copy of, this ICR by mail or courier to the U.S. Department of Labor, Employment and Training Administration, Office of Unemployment Insurance, 200 Constitution Ave NW, Washington, DC 20210; by email: *Vigliotti.Anthony.A@dol.gov;* or by fax: 202–693–3975.

FOR FURTHER INFORMATION CONTACT: Dennis Austin by telephone at 202–693–3056 (this is not a toll-free number) or by email at *Austin.Dennis@dol.gov.*

SUPPLEMENTARY INFORMATION: DOL, as part of continuing efforts to reduce paperwork and respondent burden, conducts a pre-clearance consultation program to provide the general public and Federal agencies an opportunity to comment on proposed and/or continuing collections of information before submitting them to the Office of Management and Budget (OMB) for final approval. This program helps to ensure requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements can be properly assessed.

The Immigration Reform and Control Act of 1986, Public Law 99–603, enacted November 6, 1986, amended Part A of Title XI of the Social Security Act (SSA) by adding subsections (d) and (e) to Section 1137—''Income and Eligibility Verification System''. These provisions require states to verify, through the U.S. Citizenship and Immigration Service (USCIS), the legal status of all aliens applying for benefits under certain Federally-assisted and Federally-funded programs unless their participation is waived. The USCIS verification system, commonly called the Systematic Alien Verification for Entitlement (SAVE) Program, is currently available to, and being utilized by, all states. To comply with its responsibilities under the SSA, DOL must gather information from state agencies concerning alien claimant activities. The Alien Claims Activities Report is the only source available for collecting this information. The following section explains DOL's responsibilities under the SSA and the necessity for approval of the attached Alien Claims Activities Report.

The ETA 9016 report allows DOL to determine the number of aliens filing for unemployment insurance (UI), the number of benefit issues detected, and the numbers of denials resulting from use of the USCIS SAVE system. From these data, DOL can determine the extent to which state agencies use the system, and the overall effectiveness and cost efficiency of the USCIS SAVE verification system. SSA Section 1137(d) and (e) authorize this information collection.

This information collection is subject to the PRA. A Federal agency generally cannot conduct or sponsor a collection of information, and the public is generally not required to respond to an information collection, unless it is approved by OMB under the PRA and displays a currently valid OMB Control Number. In addition, notwithstanding any other provisions of law, no person shall generally be subject to penalty for failing to comply with a collection of information that does not display a valid Control Number. See 5 CFR 1320.5(a) and 1320.6.

Interested parties are encouraged to provide comments to the contact shown in the **ADDRESSES** section. Comments must be written to receive consideration, and they will be summarized and included in the request for OMB approval of the final ICR. In order to help ensure appropriate consideration, comments should mention OMB Control No. 1205–0268.

Submitted comments will also be a matter of public record for this ICR and posted on the internet, without redaction. DOL encourages commenters not to include personally identifiable information, confidential business data, or other sensitive statements/information in any comments.

DOL is particularly interested in comments that:

- 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
- 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).

Agency: DOL–ETA.

Type of Review: Extension Without Changes.

Title of Collection: Alien Claims Activities Report.

Form: ETA 9016.

OMB Control Number: OMB 1205–0268.

Affected Public: State Workforce Agencies.

Estimated Number of Respondents: 53.

Frequency: Quarterly.

Total Estimated Annual Responses: 212.

Estimated Average Time per Response: 1 hour.

Estimated Total Annual Burden Hours: 212 hours.

Total Estimated Annual Other Cost Burden: $0.

(Authority: 44 U.S.C. 3506(c)(2)(A))

John Pallasch,

Assistant Secretary for Employment and Training.

[FR Doc. 2020–10078 Filed 5–11–20; 8:45 am]

BILLING CODE 4510–FW–P

DEPARTMENT OF LABOR

Office of the Secretary

Agency Information Collection Activities; Submission for OMB Review; Comment Request; Application for Approval of a Representative's Fee in Black Lung Claim Proceedings Conducted by the U.S. Department of Labor

ACTION: Notice of availability; request for comments.

SUMMARY: The Department of Labor (DOL) is submitting this Office of Workers' Compensation Programs (OWCP)-sponsored information collection request (ICR) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995 (PRA). Public comments on the ICR are invited.

DATES: The OMB will consider all written comments that agency receives on or before June 11, 2020.

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 particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function.

Comments are invited on: (1) Whether the collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; (2) if the information will be processed and used in a timely manner; (3) the accuracy of the agency's estimates of the burden and cost of the collection of information, including the validity of the methodology and assumptions used; (4) ways to enhance the quality, utility and clarity of the information collection; and (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.

FOR FURTHER INFORMATION CONTACT: Crystal Rennie by telephone at 202–693–0456, or by email at *DOL_PRA_PUBLIC@dol.gov.*

SUPPLEMENTARY INFORMATION: The purpose of the CM–972 is to collect pertinent data to determine if the representative's services and the amounts charged can be paid under the Black Lung Benefits Act. For additional substantive information about this ICR, see the related notice published in the **Federal Register** on January 28, 2020 (85 FR 5044).

This information collection is subject to the PRA. A Federal agency generally cannot conduct or sponsor a collection of information, and the public is generally not required to respond to an information collection, unless the OMB approves it and displays a currently valid OMB Control Number. In addition, notwithstanding any other provisions of law, no person shall generally be subject to penalty for failing to comply with a collection of information that does not display a valid OMB Control Number. *See* 5 CFR 1320.5(a) and 1320.6.

DOL 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 DOL notes that information collection requirements submitted to the OMB for existing ICRs receive a month-to-month extension while they undergo review.

Agency: DOL–OWCP.

Title of Collection: Application for Approval of a Representative's Fee in Black Lung Claim Proceedings Conducted by the U.S. Department of Labor.

OMB Control Number: 1240–0011.

Affected Public: Private Sector: Business or other for-profits.

Total Estimated Number of Respondents: 944.

Total Estimated Number of Responses: 944.

Total Estimated Annual Time Burden: 661 hours.

Total Estimated Annual Other Costs Burden: $548.

(Authority: 44 U.S.C. 3507(a)(1)(D))

Dated: May 5, 2020.

Anthony May,

Acting Departmental Clearance Officer.

[FR Doc. 2020–10077 Filed 5–11–20; 8:45 am]

BILLING CODE 4510–CK–P

DEPARTMENT OF LABOR

Mine Safety and Health Administration

[OMB Control No. 1219–0097]

Proposed Extension of Information Collection; Rock Burst Control Plan, (Pertains to Underground Metal/Nonmetal Mines)

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Request for public comments.

SUMMARY: The Department of Labor, as part of its continuing effort to reduce paperwork and respondent burden, conducts a pre-clearance consultation program to provide the general public and Federal agencies with an opportunity to comment on proposed collections of information in accordance with the Paperwork Reduction Act of 1995. This program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed. Currently, the Mine Safety and Health Administration (MSHA) is soliciting comments on the information collection for the Rock Burst Control Plan, (Pertains to Underground Metal/Nonmetal Mines).

DATES: All comments must be received on or before July 13, 2020.

ADDRESSES: Comments concerning the information collection requirements of this notice may be sent by any of the methods listed below.

- *Federal E-Rulemaking Portal: http://www.regulations.gov.* Follow the on-line instructions for submitting comments for docket number MSHA–2020–0017.
- *Regular Mail:* Send comments to USDOL–MSHA, Office of Standards, Regulations, and Variances, 201 12th Street South, Suite 4E401, Arlington, VA 22202–5452.
- *Hand Delivery:* USDOL-Mine Safety and Health Administration, 201 12th Street South, Suite 4E401, Arlington, VA 22202–5452. Sign in at the receptionist's desk on the 4th floor via the East elevator.

FOR FURTHER INFORMATION CONTACT: Roslyn B. Fontaine, Acting Director, Office of Standards, Regulations, and Variances, MSHA, at *MSHA.information.collections@dol.gov* (email); (202) 693–9440 (voice); or (202) 693–9441 (facsimile).

SUPPLEMENTARY INFORMATION:

I. Background

Section 101(a), 30 U.S.C. 811(a), allows MSHA to promulgate standards that would require operators to make and retain records from which MSHA would then collect information. Section 103(h), 30 U.S.C. 813(h), of the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. 801 *et seq.,* authorizes MSHA to collect information necessary to carry out its duty in protecting the safety and health of miners.

Title 30 CFR 57.3461 requires operators of underground metal and nonmetal mines to develop and implement a rock burst control plan within 90 days after a rock burst has been experienced. Plans are required to

include: Mining and operating procedures designed to reduce the occurrence of rock bursts; monitoring procedures where detection methods are used; and other measures to minimize exposure of persons to areas prone to rock bursts. Plans are also required to be updated as conditions warrant and to be made available to MSHA inspectors and to miners or their representatives. The standard does not require that all underground metal and nonmetal mines develop these preventative measures, but it does require that all mines with a rock burst history develop and implement a rock burst control plan.

When rock bursts occur in an underground mine, they pose a serious threat to the safety of miners in the area affected by the burst. These bursts may reasonably be expected to result in the entrapment of miners, death, and serious physical harm. Recent mining technology of monitoring rock stresses allows for the prediction of an oncoming burst. These predictions can be used by the mine operator to move miners to safer locations and to establish areas which need relief drilling.

II. Desired Focus of Comments

MSHA is soliciting comments concerning the proposed information collection related to Rock Burst Control Plan, (Pertains to Underground Metal/Nonmetal Mines). MSHA is particularly interested in comments that:

- Evaluate whether the collection of information is necessary for the proper performance of the functions of the Agency, including whether the information has practical utility;
- Evaluate the accuracy of MSHA's estimate of the burden of the collection of information, including the validity of the methodology and assumptions used;
- Suggest methods to enhance the quality, utility, and clarity of the information to be collected; and
- 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.

The information collection request will be available on *http://www.regulations.gov.* MSHA cautions the commenter against providing any information in the submission that should not be publicly disclosed. Full comments, including personal information provided, will be made available on *www.regulations.gov* and *www.reginfo.gov.*

The public may also examine publicly available documents at USDOL-Mine Safety and Health Administration, 201 12th South, Suite 4E401, Arlington, VA 22202–5452. Sign in at the receptionist's desk on the 4th floor via the East elevator.

Questions about the information collection requirements may be directed to the person listed in the **FOR FURTHER INFORMATION** section of this notice.

III. Current Actions

This request for collection of information contains provisions for Rock Burst Control Plan, (Pertains to Underground Metal/Nonmetal Mines). MSHA has updated the data with respect to the number of respondents, responses, burden hours, and burden costs supporting this information collection request.

Type of Review: Extension, without change, of a currently approved collection.

Agency: Mine Safety and Health Administration.

OMB Number: 1219–0097.

Affected Public: Business or other for-profit.

Number of Respondents: 1.

Frequency: On occasion.

Number of Responses: 1.

Annual Burden Hours: 12 hours.

Annual Respondent or Recordkeeper Cost: $0.

Comments submitted in response to this notice will be summarized and included in the request for Office of Management and Budget approval of the information collection request; they will also become a matter of public record.

Roslyn B. Fontaine,

Certifying Officer.

[FR Doc. 2020–10153 Filed 5–11–20; 8:45 am]

BILLING CODE 4510–43–P

DEPARTMENT OF LABOR

Mine Safety and Health Administration

[OMB Control No. 1219–0049]

Proposed Extension of Information Collection; Hoist Operators' Physical Fitness

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Request for public comments.

SUMMARY: The Department of Labor, as part of its continuing effort to reduce paperwork and respondent burden, conducts a pre-clearance consultation program to provide the general public and Federal agencies with an opportunity to comment on proposed collections of information in accordance with the Paperwork Reduction Act of 1995. This program helps to ensure that requested data can be provided in the desired format, reporting burden (time and financial resources) is minimized, collection instruments are clearly understood, and the impact of collection requirements on respondents can be properly assessed. Currently, the Mine Safety and Health Administration (MSHA) is soliciting comments on the information collection for Hoist Operators' Physical Fitness.

DATES: All comments must be received on or before July 13, 2020.

ADDRESSES: You may submit comment as follows. Please note that late, untimely filed comments will not be considered.

ELECTRONIC SUBMISSIONS: Submit electronic comments in the following way:

- *Federal eRulemaking Portal: https://www.regulations.gov.* Follow the instructions for submitting comments for docket number MSHA–2020–0014. Comments submitted electronically, including attachments, to *https://www.regulations.gov* will be posted to the docket, with no changes. Because your comment will be made public, you are responsible for ensuring that your comment does not include any confidential information that you or a third party may not wish to be posted, such as your or anyone else's Social Security number or confidential business information.
- If you want to submit a comment with confidential information that you do not wish to be made available to the public, submit the comment as a written/paper submission.

Written/Paper Submissions: Submit written/paper submissions in the following way:

- *Mail/Hand Delivery:* Mail or visit DOL–MSHA, Office of Standards, Regulations, and Variances, 201 12th Street South, Suite 4E401, Arlington, VA 22202–5452.
- MSHA will post your comment as well as any attachments, except for information submitted and marked as confidential, in the docket at *https://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Roslyn B. Fontaine, Acting Director, Office of Standards, Regulations, and Variances, MSHA, at *MSHA.information.collections@dol.gov* (email); (202) 693–9440 (voice); or (202) 693–9441 (facsimile).

SUPPLEMENTARY INFORMATION:

I. Background

Section 103(h) of the Federal Mine Safety and Health Act of 1977 (Mine Act), 30 U.S.C. 813(h), authorizes MSHA to collect information necessary to carry out its duty in protecting the safety and health of miners. Further, section 101(a) of the Mine Act, 30 U.S.C. 811, authorizes the Secretary of Labor to develop, promulgate, and revise as may be appropriate, improved mandatory health or safety standards for the protection of life and prevention of injuries in coal and metal and nonmetal mines.

Title 30 CFR 56.19057 and 57.19057 require the examination and certification of hoist operators' physical fitness by a qualified, licensed physician, within 12 months preceding hoisting duties. The safety of all metal and nonmetal miners riding hoist conveyances is largely dependent upon the attentiveness and physical capabilities of the hoist operator. Improper movements, overspeed, and overtravel of a hoisting conveyance can result in serious physical harm or death to passengers.

II. Desired Focus of Comments

MSHA is soliciting comments concerning the proposed information collection related to Hoist Operators' Physical Fitness. MSHA is particularly interested in comments that:

- Evaluate whether the collection of information is necessary for the proper performance of the functions of the Agency, including whether the information has practical utility;
- Evaluate the accuracy of MSHA's estimate of the burden of the collection of information, including the validity of the methodology and assumptions used;
- Suggest methods to enhance the quality, utility, and clarity of the information to be collected; and
- 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.

Background documents related to this information collection request are available at *https://regulations.gov* and in DOL–MSHA located at 201 12th Street South, Suite 4E401, Arlington, VA 22202–5452. Questions about the information collection requirements may be directed to the person listed in the **FOR FURTHER INFORMATION** section of this notice from the previous collection of information.

III. Current Actions

This information collection request concerns provisions for Hoist Operators' Physical Fitness. MSHA has updated the data with respect to the number of respondents, responses, burden hours, and burden costs supporting this information collection request from the previous information collection request.

Type of Review: Extension, without change, of a currently approved collection.

Agency: Mine Safety and Health Administration.

OMB Number: 1219–0049.

Affected Public: Business or other for-profit.

Number of Respondents: 212.

Frequency: On occasion.

Number of Responses: 1,060.

Annual Burden Hours: 35 hours.

Annual Respondent or Recordkeeper Cost: $399,620.

Comments submitted in response to this notice will be summarized in the request for Office of Management and Budget approval of the proposed information collection request; they will become a matter of public record and will be available at *https://www.reginfo.gov.*

Roslyn B. Fontaine,

Certifying Officer.

[FR Doc. 2020–10151 Filed 5–11–20; 8:45 am]

BILLING CODE 4510–43–P

DEPARTMENT OF LABOR

Veterans' Employment and Training Service

Notice of a Vacancy and Solicitation of Nominations for Appointment to the Advisory Committee on Veterans' Employment, Training, and Employer Outreach (ACVETEO)

AGENCY: Veterans' Employment and Training Service (VETS), Department of Labor (DOL).

ACTION: Notice.

SUMMARY: In accordance with section 4110 of Title 38, U.S. Code, and the provisions of the Federal Advisory Committee Act (FACA) and its implementing regulations issued by the U.S. General Services Administration (GSA), the Secretary of Labor (the Secretary), is soliciting nominations from the public to fill one vacancy from a veterans service organization that has a national employment program to be considered for appointment as a member of the Advisory Committee on Veterans' Employment, Training, and Employer Outreach (ACVETEO, or the Committee).

DATES: Nominations for membership on the Committee must be received no later than 11:59 p.m. EST on June 30, 2020. Packages received after this time will not be considered for the remainder of the current membership cycle ending January 31, 2022. The Committee looks to fill one vacancy as a result of this request. All nomination packages should be sent to the Designated Federal Official by email to *green.gregory.b@dol.gov* subject line ''2020 ACVETEO VSO Nomination''. For more information, contact Gregory B. Green, Designated Federal Official, ACVETEO, U.S. Department of Labor, 200 Constitution Ave NW, Room S–1312, Washington, DC 20210; telephone (202) 693–4734. Additional information regarding the Committee, including its charter, current membership list, annual reports and meeting minutes, may be found at *https://www.dol.gov/agencies/vets/about/advisorycommittee.*

SUPPLEMENTARY INFORMATION: The term of membership for the appointed member will run through January 31, 2022. The Committee's responsibilities are to: (a) Assess employment and training needs of veterans and their integration into the workforce; (b) determine the extent to which the programs and activities of the Department are meeting such needs; (c) assist the Assistant Secretary for Veterans' Employment and Training (ASVET) in conducting outreach to employers with respect to the training and skills of veterans and the advantages afforded employers by hiring veterans; (d) make recommendations to the Secretary of Labor, through the ASVET, with respect to outreach activities and the employment and training needs of veterans; and (e) carry out such other activities deemed necessary to making required reports and recommendations under section 4110(f) of Title 38, U.S. Code.

DOL is soliciting nominations to fill one vacancy on the Committee. The Committee is currently composed of 15 members, in addition to ex-officio members. As required by statute, the members of the Committee are appointed by the Secretary from the general public. DOL seeks nominees with the following experience:

(1) Diversity in professional and personal qualifications;

(2) Experience in military service;

(3) Current work with veterans;

(4) Veterans disability subject matter expertise;

(5) Experience working in large and complex organizations;

(6) Experience in transition assistance;

(7) Experience in the protection of employment and reemployment rights;

(8) Experience in education, skills training, integration into the workforce and outreach;

(9) Understanding of licensing and credentialing issues; and/or

(10) Experience in military/veteran apprenticeship programs.

Requirements for Nomination Submission: Nominations should be formatted in Microsoft Word or PDF (one nomination per nominator). The nomination package should include:

(1) Letter of nomination that clearly states the name and affiliation of the nominee, the basis for the nomination (*i.e.,* specific attributes, including military service, if applicable, that qualifies the nominee for service in this capacity)

(2) Statement from the nominee indicating willingness to regularly attend and participate in Committee meetings;

(3) Nominee's contact information, including name, mailing address, telephone number(s), and email address;

(4) Nominee's curriculum vitae or resume;

(5) Summary of the nominee's experience and qualifications relative to the experience listed above;

(6) Nominee biography;

(7) Statement that the nominee has no apparent conflicts of interest that would preclude membership.

(8) An affirmative statement that the nominee is not a federally registered lobbyist, and that the nominee understands that, if appointed, the nominee will not be allowed to continue to serve as an Advisory Committee member if the nominee becomes a federally registered lobbyist.

Individual selected for appointment to the Committee will be reimbursed for per diem and travel for attending Committee meetings. The Department makes every effort to ensure that the membership of its Federal advisory committees is fairly balanced in terms of points of view represented. Every effort is made to ensure that a broad representation of geographic areas, gender, racial and ethnic minority groups, and the disabled are given consideration for membership. Appointment to this Committee shall be made without discrimination because of a person's race, color, religion, sex (including gender identity, transgender status, sexual orientation, and pregnancy), national origin, age, disability, or genetic information. An ethics review is conducted for each selected nominee.

Signed at Washington, DC on May 6, 2020.

John Lowry,

Assistant Secretary for Veterans' Employment and Training Service.

[FR Doc. 2020–10079 Filed 5–11–20; 8:45 am]

BILLING CODE 4510–79–P

NATIONAL ARCHIVES AND RECORDS ADMINISTRATION

[NARA–2020–040]

Freedom of Information Act (FOIA) Advisory Committee; Meeting and Request for Public Comments

AGENCY: Office of Government Information Services (OGIS), National Archives and Records Administration (NARA).

ACTION: Notice of Federal advisory committee meeting and request for comments.

SUMMARY: We are announcing an upcoming Freedom of Information Act (FOIA) Advisory Committee meeting in accordance with the Federal Advisory Committee Act and the second United States Open Government National Action Plan. We are also providing an opportunity for the public to provide comments on the FOIA Advisory Committee's final draft report to the Archivist of the United States.

DATES: The meeting will be on June 4, 2020, from 10:00 a.m. to 1:30 p.m. EDT. You must register by midnight EDT June 2, 2020, to attend the meeting. We will post the Federal Advisory Committee's final draft report to the Archivist of the United States by May 18, 2020 and will accept public comments on the draft report through June 2, 2020.

ADDRESSES: The June 4, 2020, meeting will be a virtual meeting. We will send instructions on how to access to those who register according to the instructions below. We will post the draft report to the Archivist of the United States on GitHub at *www.github.com/usnationalarchives.* If you are unable to provide comments via GitHub, please email your comments to *foia-advisory-committee@nara.gov.*

FOR FURTHER INFORMATION CONTACT: Kirsten Mitchell, Designated Federal Officer for this committee, by email at *foia-advisory-committee@nara.gov,* or by telephone at 202.741.5770.

SUPPLEMENTARY INFORMATION: *Agenda and meeting materials:* This is the ninth and final meeting of the third committee term. The Committee will consider and vote on its final report and recommendations to the Archivist of the United States. We will post meeting materials, including a copy of the proposed final draft report, online at *https://www.archives.gov/ogis/foia-advisory-committee/2018-2020-term/meetings.*

Procedures: This virtual meeting is open to the public. You must register through Eventbrite in advance if you wish to attend and you must include an email address so that we can provide you information to access the meeting online. To request additional accommodations (*e.g.,* a transcript), email *foia-advisory-committee@nara.gov* or call 202.741.5770. Members of the media who wish to register, those who are unable to register online, and those who require special accommodations, should contact Kirsten Mitchell (contact information listed above).

Maureen Macdonald,

Designated Committee Management Officer.

[FR Doc. 2020–10070 Filed 5–11–20; 8:45 am]

BILLING CODE 7515–01–P

NATIONAL SCIENCE FOUNDATION

Advisory Committee for Environmental Research and Education; Notice of Meeting

In accordance with the Federal Advisory Committee Act (Pub. L. 92–463, as amended), the National Science Foundation (NSF) announces the following meeting:

Name and Committee Code: Advisory Committee for Environmental Research and Education (9487) (Videoconference).

Date and Time: June 5, 2020; 10:00 a.m.–5:30 p.m. EDT.

Place: NSF, 2415 Eisenhower Avenue, Alexandria, VA 22314 (Videoconference).

Interested parties can register to join via teleconference at: *https://nsf.zoomgov.com/meeting/register/vJItdu2vqj8pGjEhsVjujerdE2GOUPEthdo,* Closed Caption will be available at: *https://www.captionedtext.com/client/event.aspx?EventID=4441013&CustomerID=321.*

Type of Meeting: Open.

Contact Person: Dr. Brandi Schottel, Staff Associate, Office of Integrative Activities/Office of the Director/National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA 22314; Email: *bschotte@nsf.gov/* Telephone: (703) 292–4798.

Minutes: May be obtained from the AC's website at: *https://www.nsf.gov/ere/ereweb/minutes.jsp.*

Purpose of Meeting: To provide advice, recommendations, and oversight

concerning support for environmental research and education.

Agenda: To discuss subcommittee work and prepare for future advisory committee activities. Updated agenda will be available at *https://www.nsf.gov/ere/ereweb/minutes.jsp.*

Dated: May 6, 2020.

Crystal Robinson,

Committee Management Officer.

[FR Doc. 2020–10067 Filed 5–11–20; 8:45 am]

BILLING CODE 7555–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–334; 50–412; 50–456; 50–457; 50–244; 50–352; 50–353; 50–528; 50–529; 50–530; 72–44; 50–254; 50–265; 50–443; NRC–2020–0110]

Energy Harbor Nuclear Corp.; Exelon Generation Company, LLC; NextEra Energy Seabrook, LLC; Arizona Public Service Company

AGENCY: Nuclear Regulatory Commission.

ACTION: Exemptions; issuance.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) issued seven exemptions in response to requests from Energy Harbor Nuclear Corp.; Exelon Generation Company, LLC; NextEra Energy Seabrook, LLC; and Arizona Public Service Company. The exemptions allow the licensees to deviate from specific work hours requirements of the NRC's ''Fitness for Duty Programs'' regulation and use site-specific fatigue management controls, in response to the COVID–19 public health emergency (PHE). The NRC is issuing a single notice to announce the issuance of these exemptions.

DATES: The seven exemptions were issued between April 3, 2020, and April 20, 2020.

ADDRESSES: Please refer to Docket ID NRC–2020–0110 when contacting the NRC about the availability of information regarding this document. You may obtain publicly-available information related to this document using any of the following methods:

- *Federal Rulemaking Website:* Go to *https://www.regulations.gov* and search for Docket ID NRC–2020–0110. Address questions about NRC docket IDs in *Regulations.gov* to Jennifer Borges; telephone: 301–287–9127; email: *Jennifer.Borges@nrc.gov.* For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *https://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''Begin Web-based ADAMS Search.'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.*

For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in the ''Availability of Documents'' section.

FOR FURTHER INFORMATION CONTACT: James Danna, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001; telephone: 301–415–7422, email: *James.Danna@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Introduction

The NRC issued seven exemptions in response to requests dated between April 2, 2020, and April 18, 2020, from Energy Harbor Nuclear Corp.; Exelon Generation Company, LLC; NextEra Energy Seabrook, LLC; and Arizona Public Service Company. The exemptions allow the licensees to deviate from specific requirements (cited below) of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 26, ''Fitness for Duty Programs,'' Section 26.205, ''Work hours.''

The exemptions from 10 CFR 26.205(d)(1) through (7) ensure that the control of work hours and management of worker fatigue do not unduly limit licensee flexibility in using personnel resources to most effectively manage the impacts of the COVID–19 PHE on maintaining the safe operation of these facilities. Specifically, the licensees stated that their staffing levels are affected or are expected to be affected by the COVID–19 PHE, and they can no longer meet or likely will not meet the work hour controls of 10 CFR 26.205(d)(1) through (d)(7). The licensees have committed to effecting site-specific administrative controls for COVID–19 PHE fatigue-management for personnel specified in 10 CFR 26.4(a).

The NRC is periodically providing this compiled listing of related exemptions using a single **Federal Register** notice for COVID–19 related exemptions, instead of issuing individual **Federal Register** notices. The compiled listing provides transparency regarding the number of exemptions the NRC is issuing related to a given regulatory requirement. Additionally, the NRC publishes a list of approved licensing actions related to the COVID–19 PHE on its public website at *https://www.nrc.gov/about-nrc/covid-19/reactors/licensing-actions.html.*

II. Availability of Documents.

The table below provides the plant name, docket number, and ADAMS accession number for each exemption issued. Additional details on each exemption issued, including the exemption request submitted by the respective licensee, are provided in each exemption approval listed below. For additional directions on accessing information in ADAMS, see the **ADDRESSES** section of this document.

Document title	ADAMS accession No.
Beaver Valley Power Station, Units 1 and 2 Docket Nos. 50–334 and 50–412	
Beaver Valley Work Hour Rule Exemption Request Due to Pandemic (L–20–140) dated April 18, 2020	ML20109A008
Beaver Valley Power Station, Units 1 and 2—Verbal Part 26 Exemption—Delivered 4/18/20 at 7:00 p.m	ML20109A010
Beaver Valley Power Station, Units 1 and 2—Exemption from Select Requirements of 10 CFR Part 26 (EPID L–2020–LLE–0025 [COVID–19]) dated April 20, 2020.	ML20109A000
Braidwood Station, Units 1 and 2 Docket Nos. 50–456 and 50–457	
Braidwood Work Hours Control Exemption Request dated April 9, 2020	ML20100M588
Braidwood Station, Units 1 and 2—Exemption from Select Requirements of 10 CFR Part 26 (EPID L–2020–LLE–0020 [COVID–19]) dated April 13, 2020.	ML20099A519

Document title	ADAMS accession No.
R. E. Ginna Nuclear Power Plant Docket No. 50–244	
Ginna—Planned Actions re Requirements for Work Hour Controls During Coronavirus Disease 2019 (COVID–19) Public Health Emergency dated April 6, 2020.	ML20097D488
R. E. Ginna Nuclear Power Plant—Exemption from Select Requirements of 10 CFR Part 26 (EPID L–2020–LLE–0016 [COVID–19]) dated April 6, 2020.	ML20095H256
Limerick Generating Station, Units 1 and 2 Docket Nos. 50–352 and 50–353	
Limerick [50–352, 50–353] Actions Related to the Requirements for Work Hour Controls During the Coronavirus Disease 2019 Public Health Emergency) dated April 2, 2020.	ML20093M206
Limerick Generating Station, Units 1 and 2—Exemption from Select Requirements of 10 CFR Part 26 (EPID L–2020–LLE–0014 [COVID–19]) dated April 3, 2020.	ML20093M820
Palo Verde Nuclear Generating Station, Units 1, 2, and 3 Docket Nos. 50–528, 50–529, 50–530, and 72–44	
Palo Verde Nuclear Generating Station Units 1, 2 & 3 and Independent Spent Fuel Storage Installation (ISFSI)—Request for Exemption from Specific Requirements of 10 CFR Part 26, Fitness for Duty Programs dated April 14, 2020.	ML20105A481
Palo Verde Nuclear Generating Station, Units 1, 2, and 3—Exemption from Select Requirements of 10 CFR Part 26 (EPID L–2020–LLE–0024 [COVID–19]) dated April 16, 2020.	ML20107F835
Quad Cities Nuclear Power Station, Units 1 and 2 Docket Nos. 50–254 AND 50–265	
Quad Cities Nuclear Power Station Actions Related to the Requirements for Work Hour Controls During the Coronavirus Disease 2019 Public Health Emergency dated April 7, 2020.	ML20098G313
Quad Cities Nuclear Power Station, Units 1 and 2—Exemption from Select Requirements of 10 CFR Part 26 (EPID L–2020–LLE–0018 [COVID–19]) dated April 8, 2020.	ML20099A499
Seabrook Station, Unit No. 1 Docket No. 50–443	
Seabrook Station—Requesting NRC Approval to Proactively Enter into the Alternative Work Hour Controls Delineated in NRC Letter from H. Nieh to NEI Dated March 28, 2020 During COV–19 Public Health Emergency dated April 10, 2020.	ML20101M597
Seabrook Station, Unit No. 1—Exemption from Select Requirements of 10 CFR Part 26 (EPID L–2020–LLE–0021 [COVID–19]) dated April 13, 2020.	ML20101G991

The NRC may post additional materials to the Federal rulemaking website at *https://www.regulations.gov* under Docket ID NRC–2020–0110. The Federal rulemaking website allows you to receive alerts when changes or additions occur in a docket folder. To subscribe: (1) Navigate to the docket folder (NRC–2020–0110); (2) click the ''Sign up for Email Alerts'' link; and (3) enter your email address and select how frequently you would like to receive emails (daily, weekly, or monthly).

Dated: May 7, 2020.

For the Nuclear Regulatory Commission.

James G. Danna,

Chief, Plant Licensing Branch I, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.

[FR Doc. 2020–10138 Filed 5–11–20; 8:45 am]

BILLING CODE 7590–01–P

PEACE CORPS

Information Collection Request; Submission for OMB Review

AGENCY: Peace Corps.

ACTION: 60-Day notice and request for comments.

SUMMARY: The Peace Corps will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval. The purpose of this notice is to allow 60 days for public comment in the **Federal Register** preceding submission to OMB. We are conducting this process in accordance with the Paperwork Reduction Act of 1995.

DATES: Submit comments on or before July 13, 2020.

ADDRESSES: Comments should be addressed to Virginia Burke, FOIA/Privacy Act Officer. Virginia Burke can be contacted by email at *pcfr@peacecorps.gov.* Email comments must be made in text and not in attachments.

FOR FURTHER INFORMATION CONTACT: Virginia Burke at the Peace Corps address above.

SUPPLEMENTARY INFORMATION:

Title: Annual Coverdale Fellows Census.

OMB Control Number: 0420–***.

Type of Request: New.

Affected Public: Individuals.

Respondents Obligation to Reply: Voluntary.

Burden to the Public:

Estimated burden (hours) of the collection of information:

a. *Number of respondents:* 223.

b. *Frequency of response:* 1 time.

c. *Completion time:* 15 minutes.

d. *Annual burden hours:* 55.75 hours.

General Description of Collection: The Paul D. Coverdell Fellows program is a graduate school benefit for returned Peace Corps Volunteers (RPCVs). The program, managed by the Peace Corps' Office of University Programs, is made in formal partnership with graduate degree granting educational institutions across the United States. The partnering institutions are required to offer financial support to RPCVs who, in

turn, complete substantive internships related to their program of study in underserved communities in the United States. The Office of University Programs requires each Coverdell Fellow partner university to submit an annual Census Report to ensure it is meeting the requirements agreed upon in its signed standard Memorandum of Agreement between the Peace Corps and the institution. Collection of this information allows the Peace Corps Office of University Programs to ensure the university is providing all the necessary benefits and support to the Fellows (returned Peace Corps Volunteer graduate school students) enrolled in the program. Although this collection is called a ''Census Report'' no statistical methods are employed.

Request for Comment: The Peace Corps invites comments on whether the proposed collections of information are necessary for proper performance of the functions of the Peace Corps, including whether the information will have practical use; the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the information to be collected; and, ways to minimize the burden of the collection of information on those who are to respond, including through the use of automated collection techniques, when appropriate, and other forms of information technology.

This notice is issued in Washington, DC, on May 7, 2020.

Virginia Burke,

FOIA/Privacy Act Officer, Management.

[FR Doc. 2020–10135 Filed 5–11–20; 8:45 am]

BILLING CODE 6051–01–P

POSTAL REGULATORY COMMISSION

[Docket No. CP2019–81]

New Postal Product

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:* May 14, 2020.

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:

Table of Contents

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 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).:* CP2019–81; *Filing Title:* USPS Notice of Amendment to Priority Mail Contract 504, Filed Under Seal; *Filing Acceptance Date:* May 6, 2020; *Filing Authority:* 39 CFR 3035.105; *Public Representative:* Christopher C. Mohr; *Comments Due:* May 14, 2020.

This Notice will be published in the **Federal Register**.

Erica A. Barker,

Secretary.

[FR Doc. 2020–10148 Filed 5–11–20; 8:45 am]

BILLING CODE 7710–FW–P

[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).

POSTAL SERVICE

Product Change—Priority Mail and First-Class Package Service Negotiated Service Agreement

AGENCY: Postal Service™.

ACTION: Notice.

SUMMARY: The Postal Service gives notice of filing a request with the Postal Regulatory Commission to add a domestic shipping services contract to the list of Negotiated Service Agreements in the Mail Classification Schedule's Competitive Products List.

DATES: *Date of required notice:* May 12, 2020.

FOR FURTHER INFORMATION CONTACT: Sean Robinson, 202–268–8405.

SUPPLEMENTARY INFORMATION: The United States Postal Service® hereby gives notice that, pursuant to 39 U.S.C. 3642 and 3632(b)(3), on May 4, 2020, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & First-Class Package Service Contract 146 to Competitive Product List.* Documents are available at *www.prc.gov,* Docket Nos. MC2020–129, CP2020–136.

Sean Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2020–10142 Filed 5–11–20; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Negotiated Service Agreement

AGENCY: Postal Service™.

ACTION: Notice.

SUMMARY: The Postal Service gives notice of filing a request with the Postal Regulatory Commission to add a

domestic shipping services contract to the list of Negotiated Service Agreements in the Mail Classification Schedule's Competitive Products List.

DATES: *Date of required notice:* May 12, 2020.

FOR FURTHER INFORMATION CONTACT: Sean Robinson, 202–268–8405.

SUPPLEMENTARY INFORMATION: The United States Postal Service® hereby gives notice that, pursuant to 39 U.S.C. 3642 and 3632(b)(3), on April 29, 2020, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Contract 612 to Competitive Product List.* Documents are available at *www.prc.gov,* Docket Nos. MC2020–124, CP2020–132.

Sean Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2020–10144 Filed 5–11–20; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Elimination of Customized Postage Products

AGENCY: Postal Service™.

ACTION: Notice

SUMMARY: The Postal Service hereby provides notice that it has filed a request with the Postal Regulatory Commission to remove Customized Postage from the Mail Classification Schedule.

DATES: The request was submitted to the Postal Regulatory Commission on May 1, 2020.

FOR FURTHER INFORMATION CONTACT: Christopher Karpenko at (202) 268–2676 or Garry Rodriguez at (202) 268–7281.

SUPPLEMENTARY INFORMATION: On May 1, 2020, the United States Postal Service filed with the Postal Regulatory Commission a *Request of the United States Postal Service to Remove Customized Postage from the Mail Classification Schedule* pursuant to 39 U.S.C. 3642. Documents pertinent to this request are available at *http://www.prc.gov,* Docket No. MC2020–126.

Joshua J. Hofer,

Attorney, Federal Compliance.

[FR Doc. 2020–09703 Filed 5–11–20; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Parcel Return Service Negotiated Service Agreement

AGENCY: Postal Service™.

ACTION: Notice.

SUMMARY: The Postal Service gives notice of filing a request with the Postal Regulatory Commission to add a domestic shipping services contract to the list of Negotiated Service Agreements in the Mail Classification Schedule's Competitive Products List.

DATES: *Date of required notice:* May 12, 2020.

FOR FURTHER INFORMATION CONTACT: Sean C. Robinson, 202–268–8405.

SUPPLEMENTARY INFORMATION: The United States Postal Service® hereby gives notice that, pursuant to 39 U.S.C. 3642 and 3632(b)(3), on May 4, 2020, it filed with the Postal Regulatory Commission a *USPS Request to Add Parcel Return Service Contract 18 to Competitive Product List.* Documents are available at *www.prc.gov,* Docket Nos. MC2020–128, CP2020–135.

Sean C. Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2020–10141 Filed 5–11–20; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Negotiated Service Agreement

AGENCY: Postal Service™.

ACTION: Notice.

SUMMARY: The Postal Service gives notice of filing a request with the Postal Regulatory Commission to add a domestic shipping services contract to the list of Negotiated Service Agreements in the Mail Classification Schedule's Competitive Products List.

DATES: *Date of required notice:* May 12, 2020.

FOR FURTHER INFORMATION CONTACT: Sean Robinson, 202–268–8405.

SUPPLEMENTARY INFORMATION: The United States Postal Service® hereby gives notice that, pursuant to 39 U.S.C. 3642 and 3632(b)(3), on May 1, 2020, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Contract 613 to Competitive Product List.* Documents are available at *www.prc.gov,* Docket Nos. MC2020–127, CP2020–134.

Sean Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2020–10140 Filed 5–11–20; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail Negotiated Service Agreement

AGENCY: Postal Service™.

ACTION: Notice.

SUMMARY: The Postal Service gives notice of filing a request with the Postal Regulatory Commission to add a domestic shipping services contract to the list of Negotiated Service Agreements in the Mail Classification Schedule's Competitive Products List.

DATES: *Date of required notice:* May 12, 2020.

FOR FURTHER INFORMATION CONTACT: Sean Robinson, 202–268–8405.

SUPPLEMENTARY INFORMATION: The United States Postal Service® hereby gives notice that, pursuant to 39 U.S.C. 3642 and 3632(b)(3), on April 29, 2020, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail Contract 611 to Competitive Product List.* Documents are available at *www.prc.gov,* Docket Nos. MC2020–123, CP2020–131.

Sean Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2020–10143 Filed 5–11–20; 8:45 am]

BILLING CODE 7710–12–P

POSTAL SERVICE

Product Change—Priority Mail and First-Class Package Service Negotiated Service Agreement

AGENCY: Postal Service™.

ACTION: Notice.

SUMMARY: The Postal Service gives notice of filing a request with the Postal Regulatory Commission to add a domestic shipping services contract to the list of Negotiated Service Agreements in the Mail Classification Schedule's Competitive Products List.

DATES: *Date of required notice:* May 12, 2020.

FOR FURTHER INFORMATION CONTACT: Sean Robinson, 202–268–8405.

SUPPLEMENTARY INFORMATION: The United States Postal Service® hereby gives notice that, pursuant to 39 U.S.C. 3642 and 3632(b)(3), on April 30, 2020, it filed with the Postal Regulatory Commission a *USPS Request to Add Priority Mail & First-Class Package Service Contract 145 to Competitive Product List.* Documents are available at *www.prc.gov,* Docket Nos. MC2020–125, CP2020–133.

Sean Robinson,

Attorney, Corporate and Postal Business Law.

[FR Doc. 2020–10145 Filed 5–11–20; 8:45 am]

BILLING CODE 7710–12–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88823; File No. SR–CTA/CQ–2019–01]

Consolidated Tape Association; Order Approving the Thirtieth Substantive Amendment to the Second Restatement of the CTA Plan and Twenty-Second Substantive Amendment to the Restated CQ Plan, as Modified by the Commission, Concerning Conflicts of Interest

May 6, 2020.

I. Introduction

On July 5, 2019,[1] the Consolidated Tape Association Plan (''CTA Plan'') participants (''Participants'')[2] filed with the Securities and Exchange Commission (''SEC'' or ''Commission'') pursuant to Section 11A of the Securities Exchange Act of 1934 (''Act''),[3] and Rule 608 of Regulation National Market System (''NMS'') thereunder,[4] a proposal to amend the Second Restatement of the CTA Plan and the Restated Consolidated Quotation Plan (''CQ Plan'') (each a ''Plan'' and together with the CTA Plan, the ''Plans'').[5] These amendments represent the Thirtieth Substantive Amendment to the CTA Plan and the Twenty-Second Substantive Amendment to the CQ Plan (''Amendments''). As described in the Amendments, the Participants proposed to make mandatory a conflicts of interest disclosure regime that currently is voluntary. The Amendments were published for comment in the **Federal Register** on January 14, 2020.[6] This order approves the Amendments to the Plans, as modified by the Commission. The Commission concludes that the Amendments, as modified, are appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanism of a national market system, or is otherwise in furtherance of the purposes of the Act.[7] A copy of the Amendments, as modified by the Commission, is attached as *Exhibit A* hereto.

II. Description of the Proposal

Under the current practice, which the Amendments proposed to make mandatory, the Participants,[8] the Processor,[9] the Administrator,[10] and the members of the Advisory Committee [11] (collectively, the ''Disclosing Parties'') [12] voluntarily respond to a set of questions designed to provide transparency regarding potential conflicts of interest of such parties. Each of the Disclosing Parties' responses is made publicly available on the Plans' website and is updated at least annually.[13] The Amendments would make this practice mandatory. The Participants stated that they believe that publicly providing these responses increases transparency and confidence in the governance of the Plans.[14]

According to the Participants, with exchanges permitted to offer both proprietary market data products and also acting as Participants in running the public market data stream, potential conflicts of interest are inherent.[15] There may be instances in which representatives from the Participants and Advisory Committee members have responsibilities with respect to both proprietary data and Securities Information Processor (''SIP'') data.[16] Drawing on the expertise of persons with such overlapping responsibilities may give rise to potential conflicts of interest, and to address such potential conflicts of interest, the Participants adopted a voluntary conflicts disclosure regime with questions that are tailored to elicit responses that disclose potential conflicts of interest.

Under their current approach to disclosure, each self-regulatory organization (''SRO'') discloses details about its ownership; whether it offers and charges for proprietary market data; the names of all representatives authorized to vote; and a narrative description of the representatives' role within the organization, including any direct responsibilities related to the development, dissemination, sale, or marketing of the exchange's proprietary market data and the nature of those responsibilities. The Administrator and Processor disclose any employment or affiliation with an SRO and a narrative description of functions performed; whether it provides any services to, or has any responsibilities for the profitability of that SROs' proprietary market data products; and any policies and procedures in place to safeguard confidential Plan information. Finally, non-SRO Advisory Committee members disclose a description of their role at the firm with which they are associated, including whether they have responsibilities related to the use or procurement of market data or the firm's trading or brokerage services, whether they use the SIP or exchange proprietary data, whether they hold ownership in an SRO, and whether they are actively participating in any litigation against the Plans. The disclosures are made annually, updated in response to material changes, and are publicly posted on the Plans' website.

III. Discussion and Modifications by the Commission

Pursuant to Rule 608, the Commission shall approve the amendments, ''with such changes or subject to such conditions as the Commission may deem necessary or appropriate,'' if it finds that they are ''necessary or

[1] *See* Letter from Robert Books, Chair, CTA/CQ Plans Operating Committee to Vanessa Countryman, Secretary, Commission, dated July 3, 2019 (''Transmittal Letter'').

[2] The Participants are the national securities association and national securities exchanges that submit trades and quotes to the Plans and include: Cboe BYX Exchange, Inc., Cboe BZX Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe EDGX Exchange, Inc., Cboe Exchange, Inc., NYSE Chicago, Inc., Financial Industry Regulatory Authority, Inc., The Investors Exchange LLC, Long-Term Stock Exchange, Inc., Nasdaq BX, Inc., Nasdaq ISE, LLC, Nasdaq PHLX, Inc., The Nasdaq Stock Market LLC, New York Stock Exchange LLC, NYSE American LLC, NYSE Arca, Inc., and NYSE National, Inc. (each a ''Participant'' and collectively, the ''Participants''). Participants are also members of the Plans' Operating Committees.

[3] 15 U.S.C. 78k–1.

[4] 17 CFR 242.608.

[5] *See* Securities Exchange Act Release Nos. 10787 (May 10, 1974), 39 FR at 17799 (May 20, 1974) (declaring the CTA Plan effective); 15009 (July 28, 1978), 43 FR at 34851 (August 7, 1978) (temporarily authorizing the CQ Plan); and 16518 (January 22, 1980), 45 FR at 6521 (January 28, 1980) (permanently authorizing the CQ Plan). The most recent restatement of both Plans was in 1995. The CTA Plan, pursuant to which markets collect and disseminate last sale price information for non-NASDAQ listed securities, is a ''transaction reporting plan'' under Rule 601 under the Act, 17 CFR 242.601, and a ''national market system plan'' under Rule 608 under the Act, 17 CFR 242.608. The CQ Plan, pursuant to which markets collect and disseminate bid/ask quotation information for listed securities, is a ''national market system plan'' under Rule 608 under the Act, 17 CFR 242.608.

[6] *See* Securities Exchange Act Release No. 87907 (January 8, 2020), 85 FR 2193 (January 14, 2020) (''Notice''). Comments received in response to the Notice are available at *https://www.sec.gov/comments/sr-ctacq-2019-01/srctacq201901.htm.*

[7] 17 CFR 242.608(b)(2).

[8] *See supra* note 2 (listing the Participants).

[9] The ''Processor'' is charged with collecting, processing and preparing for distribution or publication all Plan information. The Processor of the Plans is the Securities Industry Automation Corporation.

[10] The ''Administrator'' is charged with administering the Plans to include data feed approval, customer communications, contract management, and related functions. The Administrator of the Plans is the New York Stock Exchange LLC.

[11] The ''Advisory Committee members'' are natural persons who represent particular types of financial services firms or actors in the securities market, and who were selected by Plan participants to be on the Advisory Committee.

[12] A list of the Processor, Administrator, and Advisory Committee members, along with their conflict of interest disclosures, is available at *https://www.ctaplan.com/governance.*

[13] *See id.*

[14] *See* Notice, *supra* note 6, 85 FR at 2193.

[15] *See id.*

[16] *See id.*

appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanisms of, a national market system, or otherwise in furtherance of the purposes of the Act.'' [17]

The Commission agrees with the Participants that potential conflicts of interest are inherent in the current market data governance structure where exchanges can offer proprietary market data products while they also act as Participants in running the public market data stream. Indeed, as we recognized in the Notice, the Commission has separately raised broader concerns about the impact of these conflicts on the governance of the Plans.[18] And the Commission solicited comment as to ''whether the Amendments to the current Plans address the concerns outlined in the Governance Notice or whether they should be further enhanced regarding conflicts of interest in national market system plan governance.''

After carefully considering the comments received on the Notice, the Commission is modifying the Amendments pursuant to Section 11A of the Act [19] and Rule 608 thereunder,[20] as discussed in detail below. The Commission agrees that the current voluntary conflicts of interest disclosure regime should be made mandatory, but believes that the modifications set forth below, including enhanced disclosure requirements and a requirement that an SRO be recused from voting when it or an affiliate is competing for a contract with the Plans, are appropriate in order to provide fuller transparency and further address conflicts of interest. Specifically, the Commission believes that the Plans should require additional public disclosures of any personal, business, or financial interests, and any employment relationships that would affect the ability of a party to the Plans, or its representative, to be impartial regarding the objectives and actions of the Plans. Further, the Commission believes that the Plans should impose additional disclosure requirements on Participants and their representatives, Processors, Administrators, Advisory Committee members, and service providers and subcontractors to the Plans.

The Commission believes that full disclosure of all material facts necessary for market participants and the public to understand the potential conflicts of interest inherent in the current market data structure is an important approach to dealing with those potential conflicts. Detailed, clear, and meaningful disclosures that provide insight into otherwise non-transparent structures and operations can raise awareness by bringing these important issues into the light. In turn, increased access to information can facilitate public confidence in Plan operations as well as promote self-awareness on the part of Disclosing Parties that can support their efforts to identify and address those potential conflicts. The Commission believes that by requiring full disclosure of all material facts necessary to identify the nature of a potential conflict of interest and the effect it may have on Plan action, all parties, including the Commission and the public, will be better positioned to evaluate competing interests among any of the parties involved in governing, operating, and overseeing the Plans, as those competing interests could materially affect their ability to carry out the purposes of the Plans.

Specifically, the Commission is modifying the Amendments as described below:

A. Enhanced Disclosures

1. Service Providers and Subcontractors

In the Notice, the Commission solicited comment on whether enhanced conflicts disclosures should be required. Among other questions, the Commission asked whether commenters ''think any other types of persons should be required to provide disclosures, such as service providers to the Administrator that provide audit, accounting, or other professional services.'' [21] Further, the Commission asked whether disclosures and conflicts policies should be applicable to subcontractors, for example where ''the Administrator enlists assistance from an auditor or any other professional services subcontractor for any of the Plan(s)'' including most prominently when ''the subcontractor is affiliated with an entity that is involved in the development, pricing, or sale of proprietary data products offered to SIP customers, or is subject to any other conflict.'' [22]

In response to the Notice, the Advisory Committee recommended that the Amendments ''should apply to service providers engaged in audit or other professional service functions.'' [23] Another commenter stated that ''service providers (*e.g.,* audit, accounting, legal, and other professional providers) should be required to provide disclosures to ensure such individuals remain independent of conflicts in both appearance and fact'' and asserted that ''[s]uch service providers are operating for the benefit of the Plan(s), and must be sufficiently independent of other functions to ensure they provide qualified, accurate and unbiased services.'' [24]

The Commission is modifying the Amendments to require the Participants, Administrator, Processor, or Operating Committee to only use service providers and subcontractors that make the required disclosures in certain circumstances.[25] Specifically, the Commission is adding the words ''and each service provider or subcontractor engaged in Plan business (including the audit of subscribers' data usage) that has access to Restricted or Highly Confidential Plan information'' and defining those, together with the existing parties, within the term ''Disclosing Parties'' as used in Section (f)(1) of the CTA Plan (Section (e)(1) of the CQ Plan). Further, the Commission is specifying that ''The Operating Committee, a Participant, Processor, or Administrator may not use a service provider or subcontractor on Plan business unless that service provider or subcontractor has agreed in writing to provide the disclosures required by this section and has submitted completed disclosures to the Administrator prior to starting work.'' As is the case for all other Disclosing Parties, disclosures provided by service providers and subcontractors would be made public.

The Commission believes that the proposed disclosures contained in the Amendments are insufficient in that they do not apply at all to service providers to the Plans. For example, service providers can be affiliated with

[17] 17 CFR 608(b)(2).

[18] *See* Notice, *supra* note 6, 85 FR at 2193. *See also* Securities Exchange Act Release No. 87906 (January 8, 2020), 85 FR 2164 (January 14, 2020) (File No. 4–757) (''Governance Notice'').

[19] 15 U.S.C. 78k–1.

[20] 17 CFR 608.

[21] Notice, *supra* note 6, 85 FR at 2195.

[22] *Id.* at 2196.

[23] Letter from CTA/UTP Advisory Committee to Vanessa Countryman, Secretary, Commission, dated January 24, 2020 (''Advisory Committee Letter''), at 2. The Advisory Committee further recommended that the audit function be managed directly by the Plans and performed by an entity different from the entity engaged to audit the exchange's proprietary data products. *See id.* The Commission is not incorporating that suggestion at this time but believes it warrants further consideration.

[24] Letter from Joseph Kinahan, Managing Director, Client Advocacy and Market Structure, TD Ameritrade to Vanessa A. Countryman, Secretary, Commission, dated February 4, 2020 (''TD Ameritrade Letter''), at 5.

[25] The Commission is using the term ''service providers and subcontractors'' to capture any natural person or entity engaged in Plan business, including those that may be affiliated with a Disclosing Party.

a Participant or the Administrator. In that case, the potential conflicts of interest that apply to the Participant or Administrator could equally apply to the service provider. These conflicts, as discussed above, exist because some exchange Participants have a dual role as both an SRO responsible for the operation of the SIP, on one hand, and, on the other hand, as part of a publicly held company that offers proprietary data products and connectivity services.[26] The exchanges generate revenue from these proprietary data products in addition to the revenue the exchanges receive from the Plans. Given service providers' and subcontractors' access to competitively sensitive and commercially valuable Plan-related information, and the potential for competitive harm if they share such information with the Participants or their affiliates, the Commission believes that conflicts of interest can also arise with respect to service providers and subcontractors that may be under the direction of, or affiliated with, an exchange Participant, Administrator, or Processor, or those that may be under the direction of the Operating Committee. The Commission believes it is appropriate to include within the scope of the Amendments non-affiliates, including legal counsel, because they would be under the direction of one or more Participants, engaged in Plan business, and have access to Restricted or Highly Confidential Information. Accordingly, the inherent conflicts of interest faced by Participants, discussed above, could be perceived by a reasonable objective observer to also affect the ability of such non-affiliated persons to be impartial. Obtaining disclosures from such service providers and subcontractors would therefore serve the purposes of the Amendments to the same extent they do for any other Disclosing Party.

The Commission therefore believes it is appropriate to include service providers and subcontractors within the scope of the conflicts of interest disclosures by prohibiting the Operating Committee, a Participant, the Processor, or the Administrator from using a service provider or subcontractor on Plan business unless that service provider or subcontractor has agreed to submit and keep current the required disclosures.[27]

To implement the expansion of the required disclosures to service providers and subcontractors engaged in Plan business that have access to any level of confidential information, the Commission believes it is appropriate to add the following new section under *Required Disclosures* to apply to service providers and subcontractors:

Pursuant to Section IV(f)(1) of the CTA Plan (Section IV(e)(1) of the CQ Plan), each service provider or subcontractor that has agreed in writing to provide required disclosures and be treated as a Disclosing Party pursuant to Section IV(f) of the CTA Plan (Section IV(e) of the CQ Plan) shall respond to the following questions and instructions:

- Is the service provider or subcontractor affiliated with a Participant, Processor, Administrator, or member of the Advisory Committee? If yes, disclose with whom the person is affiliated and describe the nature of the affiliation.
- If the service provider's or subcontractor's compensation is on a commission basis or is tied to specific metrics, provide a detailed narrative summary of how compensation is determined for performing work on behalf of the Plan.
- Is the service provider or subcontractor subject to policies and procedures (including information barriers) concerning the protection of confidential information that includes affiliates? If so, describe. If not, explain their absence.
- Does the service provider or subcontractor, or its representative, have any other relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with its responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.

These disclosures require information that details the nature of any affiliation with other Disclosing Parties, provides information on the service provider's compensation arrangement, and asks about information barriers given the sensitive information to which such persons have access, all of which are consistent with the disclosures required of other Disclosing Parties. Finally, these disclosures include the new ''catch-all'' question that the Commission is adding to all Disclosing Parties' disclosures, which is discussed further below.[28] Together, the Commission believes that these provisions will, as with their applicability to all other Disclosing Parties, provide important transparency into potential conflicts of interest that parties that provide important services to the Plans may encounter. The Commission believes that this transparency is important for service providers and subcontractors engaged in Plan business that have access to confidential Plan information because those service providers and subcontractors act at the direction of a Disclosing Party (*e.g.,* the Administrator or Processor) and may be affiliated with them, or may be acting at the direction of the Operating Committee and may be affiliated with one of the Participants that compose the Operating Committee. As such, those service providers and subcontractors likely are subject to the same or similar potential conflicts of interest and thus should be treated like any other Disclosing Party in making public disclosures about those potential conflicts.

Further, the Commission believes it is appropriate to modify Section (f)(1) of the CTA Plan (Section (e)(1) of the CQ Plan) to specify that the Disclosing Parties shall complete the applicable questionnaire[29] ''to provide the required disclosures set forth below to disclose all material facts necessary to identify potential conflicts of interest.'' The Commission believes it is appropriate to add this detail to Section (f)(1) of the CTA Plan (Section (e)(1) of the CQ Plan) to emphasize that a Disclosing Party's responses to the required disclosures must be sufficiently detailed to disclose all material facts to identify applicable potential conflicts of interest. Disclosures that fail to disclose all

[26] For example, Participants may offer proprietary data products with content in excess of the core data offered by the SIPs, as well as other top-of-book proprietary data products with less content that can be marketed as a cheaper alternative to the SIP. Examples of such proprietary top-of-book products are NASDAQ Basic (*https://business.nasdaq.com/intel/GIS/nasdaq-basic.html*), Cboe One Feed (*https://markets.cboe.com/us/equities/market_data_services/cboe_one/*), and NYSE BBO (*https://www.nyse.com/market-data/real-time/bbo*).

[27] To the extent the Operating Committee, a Participant, the Processor, or the Administrator seeks to use the services of a service provider or subcontractor for Plan business, it would first need to secure a written commitment from the service provider or subcontractor to agree to submit a required disclosure and be treated as a Disclosing Party, and the service provider or subcontractor must in fact adhere to the provisions applicable to all Disclosing Parties, including the process for updating the disclosures and submitting them to the Administrator for public dissemination in Section (f)(1)(ii) and (iii) of the CTA Plan (Section (e)(ii) and (iii) of the CQ Plan) as well as the recusal provisions in Section (f)(2) of the CTA Plan (Section (e)(2) of the CQ Plan).

[28] *See infra* Section III(A)(3)(d) (discussing the catch-all question).

[29] In the reference to the applicable questionnaire, the Commission is deleting the phrase ''attached to this UTP Plan as Exhibit 3.'' The Amendments, as modified, will require the Administrator to update the questionnaires. The Commission is not now attaching updated questionnaires as Exhibit 3.

material facts will be insufficient to identify potential conflicts of interest and to provide sufficient context for the public to understand how those potential conflicts of interest are relevant to the Plans' governance and operations. An example of a ''material fact necessary to identify potential conflicts of interest'' could include whether a situation giving rise to a potential conflict of interest could have a potential adverse effect on the Plans.[30]

Finally, the Commission is modifying Section (f)(1) of the CTA Plan (Section (e)(1) of the CQ Plan) to provide that ''[i]f state laws, rules, or regulations, or applicable professional ethics rules or standards of conduct, would act to restrict or prohibit a Disclosing Party from making any particular required disclosure, a Disclosing Party shall refer to such law, rule, regulation, or professional ethics rule or standard and include in response to that disclosure the basis for its inability to provide a complete response. This does not relieve the Disclosing Party from disclosing any information it is not restricted from providing.'' The Commission believes this modification is appropriate to accommodate the potential that a small number of Disclosing Parties, for example service providers that are licensed attorneys, may be unable to complete one or more of the disclosures due to their obligations under potentially conflicting laws, rules, or professional standards. This modification will allow such a Disclosing Party to provide responses to the required disclosures by identifying the particular conflicting laws or professional standards and discussing the basis for its inability to provide a complete response while providing information it is not restricted from disclosing.

2. Scope of the Amendments

In the Notice, the Commission solicited comment on whether the Amendments are sufficient to elicit information necessary to provide insight into all potential conflicts. Among other questions, the Commission asked whether commenters ''believe that the Plans should require additional public disclosures of any personal, business, or financial interests, and any employment or other commercial relationships that could materially affect the ability of a party to be impartial regarding actions of the Plans'' as well as whether commenters ''believe that the proposed disclosure questions for each party are sufficient to identify the specific relationships that may give rise to a conflict under the Plan and related information.'' [31] The Commission further asked whether commenters ''believe that the proposed questions effectively require all material facts necessary to not only identify the nature of the conflict, but also the effect it may have on the Plans'' and whether the Amendments should require ''additional public disclosures of any personal, business, or financial interests, and any employment or other commercial relationships that could materially affect the ability of a party to be impartial regarding actions of the Plans.'' [32]

The Commission also asked questions about the nature of the potential conflicts faced by parties involved with the operation and oversight of the Plans and whether commenters believe the Amendments would require adequate disclosure in sufficient detail about and/or address those conflicts. For example, the Commission stated: ''[w]ith Exchanges permitted to offer both proprietary market data products and also acting as Participants in running the public market data stream, potential conflicts of interest are inherent . . . .'' [33] The Amendments themselves similarly provide that ''[t]here may be instances in which representatives from the Participants and Advisory Committee members have responsibilities with respect to both proprietary data and [SIP] data'' and that ''such overlapping responsibilities may give rise to potential conflicts of interest.'' [34]

In response to the Notice, the Advisory Committee said it believes the disclosure of conflicts of interest is important for Participants, Advisors, Administrators, and Processors but believes publishing the conflicts of interest, as proposed by the Participants, ''does not adequately address the conflicts of interest.'' [35] For example, the Advisory Committee believes that the disclosures ''do not address situations where Participants sell competing products and may vote [on Plan matters] in ways that protect the commercial interest of the Participant, rather than furthering the goals of the Plans.'' [36] To address this, the Advisory Committee recommended changes to expand the scope of the Amendments beyond disclosure and affirmatively require that individuals participating in the activities of the Plans' Operating Committee act in furtherance of the goals of the Plans, that individuals recuse themselves when there is a material conflict between the goals of the Plan and their interests or their employer's interest, and that service providers engaged in audit or other professional service functions also be subject to the conflicts of interest policy.[37]

Another commenter agreed with this viewpoint stating ''market developments have heightened the potential for and perception of conflicts of interest between the exchanges' commercial interests and their regulatory obligations under the Act and [Plans] to produce and provide core data.'' [38] The commenter stated that it ''does not believe the proposed amendments completely address the potential conflicts'' noting that ''the lower cost of exchange top of book products, coupled with the costs associated with processes imposed by the Plans, including associated audit burdens, favors retail broker-dealer use of exchange proprietary top of book products, which puts the interests of the exchanges in producing such products above that of the Securities Information Processor and may create direct conflict with their roles as Administrators.'' [39] The commenter recommended that the ''Plan(s) should require that all individuals providing disclosures include any additional relationships, whether personal, employment, or commercially related, which may present a perceived or actual conflict of interest with their assigned role(s) for the Plan(s).'' [40]

[30] For example, a Participant that offers its own top-of-book data product to SIP customers for substantially lower fees than the SIP could be conflicted when considering a Plan proposal to have the SIP offer similar top-of-book products, and this conflict could influence a decision by the Plans not to offer such a product. Similarly, a Participant that offers an enhanced depth-of-book data product to SIP customers could be conflicted when considering a Plan proposal to expand the SIP to include enhanced depth-of-book data, and this conflict also could influence a decision by the Plans not to offer such a product. *See also* new Section (f)(1)(i) of the CTA Plan (Section (e)(1)(i) of the CQ Plan) (specifying that a ''potential conflict of interest may exist when personal, business, financial, or employment relationships could be perceived by a reasonable objective observer to affect the ability of a person to be impartial''), which provides guidance as to the scope of the disclosures.

[31] Notice, *supra* note 6, 85 FR at 2195.

[32] *Id.* at 2195–96.

[33] *Id.* at 2195.

[34] *Id.* at 2193.

[35] Advisory Committee Letter, *supra* note 23, at 1–2.

[36] *Id.* at 2.

[37] *Id.*

[38] TD Ameritrade Letter, *supra* note 24, at 2.

[39] *Id.* at 2–3.

[40] *Id.* at 6.

A third commenter similarly stated that ''the structure of the Plans and their governance model is inherently conflicted'' and only fundamental reform can address the conflicts, which the commenter said could involve ''true independence'' of the Participants from the Administrators and Processors.[41] One commenter broadly asserted that the ''required disclosures fail to identify many of the potential conflicts of interest inherent in the system, and utterly fail to quantify the magnitude of firms' conflicts of interest, financial incentives, and other relationships'' and ''perhaps at the most basic level, they generally don't provide the public with any information we didn't already know.''[42]

The Commission agrees that the proposed amendments do not adequately address potential conflicts, and believes that a Disclosing Party's access to confidential information it obtains as a result of its involvement with the Plans can create potential conflicts of interest that could influence the decisions it makes with respect to the Plans' operation. The Commission believes that the Amendments should be modified to provide more transparency into those potential conflicts. These conflicts can impede the ''prompt, accurate, reliable and fair collection, processing, distribution, and publication of information with respect to quotations for and transactions in such securities and the fairness and usefulness of the form and content of such information.''[43] For example, the exchanges' commercial interests in their proprietary data businesses, as well as the exchange-affiliated Administrators' access to confidential subscriber and audit information that is commercially and competitively valuable to that proprietary data business, have created conflicts of interest that could influence decisions as to the Plans' operation. As the Participants acknowledged in the Notice, disclosure of these conflicts and other potential conflicts of interest is an important step in addressing potential conflicts of interest.[44]

Given the importance of disclosing these potential conflicts of interest, the Commission is modifying the proposed Amendments to help ensure that the Amendments are clear and that the objectives of the disclosure requirements are uniformly applied. Specifically, as discussed above, the Commission is adding to Section (f)(1) of the CTA Plan (Section (e)(1) of the CQ Plan) further detail to specify that the disclosures are eliciting information on ''all material facts necessary to identify potential conflicts of interest.'' Further, the Commission is including language to specify in new Section (f)(1)(i) of the CTA Plan (Section (e)(1)(i) of the CQ Plan) that a ''potential conflict of interest may exist when personal, business, financial, or employment relationships could be perceived by a reasonable objective observer to affect the ability of a person to be impartial.'' This new text establishes an objective standard for the disclosures by requiring that the potential conflicts of interest to be disclosed are to be viewed through the lens of a reasonable objective observer considering impartiality. This standard is needed so that the requirement to disclose potential conflicts of interest is not triggered solely based on the subjective views of the Disclosing Party. Impartial third parties, including members of the public, will be among those reviewing the disclosures and they should be assured that, across all Disclosing Parties, the disclosures are comprehensive, consistent, and do not display the potentially biased perspective of the Disclosing Party. The disclosures must be meaningful and sufficiently detailed to provide any reasonable objective observer that reads the disclosures with adequate transparency into matters such that she is able to determine whether the Disclosing Party would be able to be impartial in its role with the operation and oversight of the Plans.

3. Enhanced Party-Specific Disclosures

In addition to asking questions about the overall scope and sufficiency of the Amendments and the general disclosure-based approach they contain, the Commission also solicited comment on a number of detailed questions in the Notice about the potential conflicts faced by various entities, including individual Disclosing Parties, service providers, and subcontractors.

a. Participants

In addition to those questions mentioned above, the Commission asked whether commenters ''believe that any individual representing a Participant that is directly involved in the management, development, pricing, or sale of proprietary data products offered to SIP customers should participate in discussions and related Plan votes regarding the pricing of SIP data products'' and how commenters ''believe Participants should address the conflicts their representatives may face in their dual role of pricing and developing SIP data products as well as their own proprietary data products.''[45]

In response to the Notice, one commenter suggested that ''in addition to disclosing whether a participant's firm charges a fee for the provision of data, the participant should reveal the percentage of revenues derived from the sale of proprietary data, and separately core SIP data, as a percentage of total revenue.''[46] Another commenter urged the Commission to either deny the Amendments or to expand them dramatically to include information that ''might actually help the Commission and third parties quantify and assess the Disclosing Parties' conflicts of interest'' such as ''a disclosure by each exchange of its costs in producing SIP data, the revenues from the SIP data, costs in producing competing proprietary data products, revenues from the competing data products, analyses of the extent of the customer overlap of those products, details regarding the projected impact of improving the content and timeliness of the SIPs on those competing data products, and more.''[47]

On this issue, another commenter expressed concern about the ''potential for and perception of conflicts of interest between the exchanges' commercial interests and their regulatory obligations . . . to provide core data.''[48] One commenter recommended broadly that questions eliciting disclosures for Participants, Processors, Administrators, and Advisory Committee members should ''provide detailed and specific information regarding a potential conflict of an individual (and not specifically their employer)'' and the information should include not only the individual's general role ''but also specific information about that individual's contractual requirements, compensation structures, resource allocations, and information access that may cause a perceived conflict.''[49] The

[41] *See* Letter from Jeff Brown, Senior Vice President—Legislative and Regulatory Affairs, Charles Schwab, to Vanessa Countryman, Secretary, Commission, dated February 4, 2020 (''Charles Schwab Letter''), at 3–4. *See also infra* note 72.

[42] Letter from Tyler Gellasch, Executive Director, The Healthy Markets Association, to Vanessa Countryman, Secretary, Commission, dated February 20, 2020 (''Healthy Markets Letter''), at 18.

[43] 15 U.S.C. 78k–1(c)(1)(B).

[44] *See* Notice, *supra* note 6, 85 FR at 2194.

[45] Notice, *supra* note 6, 85 FR at 2196.

[46] Letter from Rich Steiner; Head of Client Advocacy and Market Information, RBC Capital Markets, to Vanessa Countryman, Secretary, Commission, dated February 4, 2020 (''RBC Letter''), at 2.

[47] Healthy Markets Letter, *supra* note 42, at 18.

[48] TD Ameritrade Letter, *supra* note 24, at 2. *See supra* text accompanying note 39.

[49] *Id.* at 4. The commenter stated that ''the questions for Participants, Processors, Administrators and members of the Advisory Committee are not completely sufficient to elicit the

commenter stated that enhanced disclosure ''would ensure sufficient, transparent information is available for the public to effectively analyze the potential conflicts being disclosed.'' [50]

After considering the comments received in response to the Notice, the Commission believes it is appropriate to enhance the required disclosures of Participants in two ways. First, the Commission is adding requested disclosures to a question regarding whether Participants offer proprietary data. Currently, the question asks whether the Participant firm offers real-time proprietary equity data and, if so, whether the Participant charges a fee. The Commission is modifying the question to require a Participant also to ''list each product, describe its content, and provide a link to the fee schedules where fees for each product are disclosed.'' [51] As suggested by a commenter, this additional disclosure follows logically from, and provides more information in relation to, the existing question of whether a Participant offers proprietary data and whether it charges for it. The Commission believes it is insufficient merely to ask a ''yes or no'' question on an issue that is at the core of the potential conflicts of interest inherent to the Plans' current governance structure. There are various types of proprietary data offered and fees charged for it, and these offerings and fees serve as the principal sources of the potential conflict. Without more information on the material underlying facts related to specific proprietary data offerings and fees, a simple disclosure that such offerings and fees exist is not sufficient to elucidate the nature and extent of the potential conflict. The Commission believes Participants should identify and describe the specific proprietary data products they offer. Doing so will allow anyone who reads the disclosure to evaluate the proprietary data products and assess whether and how they overlap with the SIP.

For example, as stated above, a Participant may offer more expensive proprietary data products with content in excess of the core data offered by the SIPs, as well as other top-of-book proprietary data products with less content that can be marketed as a less expensive alternative to the SIP. Both types of proprietary data products contain information that overlaps to some extent with what the SIP provides, but one is offered as a more expensive and enhanced data product while the other is offered as a less expansive and less expensive alternative to the SIP. In doing so, the Participant offers its own data product because the SIP does not offer something similar. The Participant, however, is not just offering a different product (potentially expanded in content or lower in price) compared to the SIP in this respect; it, together with other Participants, governs (and possibly operates) the SIP. Disclosure of certain information about these proprietary data products offered by a Participant, and a link to fee schedules for such products, can reveal material facts (*i.e.,* the Participant's pricing of its proprietary data products that it offers to SIP customers). These material facts are relevant to whether a Participant may, for example, be disincentivized to support expanding the content of SIP core data or to support the SIP offering an optional and less expensive data feed, as well as material facts relevant to a Participant's pricing strategy for the SIP as compared to its own proprietary data product offerings. Either of those cases would involve the SIP offering a similar product to that already offered as a proprietary data product by the Participant. With full disclosure of these material facts, a reasonable objective observer would better understand the potential conflict of interest the Participant faces in its governance of the Plans, including what conflicts of interest the Participant would face when it discusses and votes on SIP proposals to provide data products similar to those provided by the Participants at prices that match or undercut the Participant's own fees for proprietary products. As revised, the disclosures will provide valuable additional insight into the nature and extent of a principal source of the potential conflict of interest an exchange has in its dual role of overseeing the Plans while offering its own proprietary data products.

Second, the Commission is modifying the disclosures for the Participant's representative to require greater disclosure of the individual's connection with the Participant's proprietary market data business. Specifically, the Commission is adding the phrase ''sufficient for the public to identify the nature of any potential conflict of interest that could be perceived by a reasonable objective observer as having an effect on the Plan.'' Further, the Commission is adding to the question the following: ''If the representative works in or with the Participant's Proprietary Market Data business, describe the representative's roles and describe how that business and the representative's Plan responsibilities impact his or her compensation. In addition, describe how a representative's responsibilities with the Proprietary Market Data business may present a conflict of interest with his or her responsibilities to the Plan.''

This modification, which conforms to the modification of the scope of the Amendments discussed above, requires that Participants provide sufficient detail in their responses to this particular item because it is central to the potential conflicts of interest at issue. Without sufficiently detailed disclosure of the underlying facts, the disclosure would not provide effective insight into the potential conflicts of interest the Participant's representative personally has in his or her role with the Plans. For example, if the representative's compensation is tied directly and substantially to the profitability of the Participant's proprietary market data business, then the representative might face a conflict of interest when working on Plan matters, most notably when considering whether to enhance or more competitively price Plan data products in ways that would compete with the Participant's proprietary data products. While the Commission would expect this information to be disclosed in response to the existing question, the Commission seeks to avoid any doubt and ensure sufficiently detailed responses to the question on this important disclosure.

b. Processors

In the Notice, the Commission asked whether commenters ''have concerns about affiliations between a Plan's Processor and a Participant'' and, if so, whether commenters ''believe the conflicts of interest disclosure is sufficient to address those concerns'' or whether ''the Amendments [should] require a description of the nature of the affiliation.'' [52] In addition, the Commission asked whether commenters ''have concerns about affiliations between a Plan's Processor and a Participant'' and, if so, whether they ''believe the conflicts of interest disclosure is sufficient to address those concerns'' or whether ''the Amendments [should] require a description of the

necessary information to provide insight into all potential conflicts for an individual.'' *Id.* at 3–4.

[50] *Id.*

[51] In requiring Participants to provide a link to the fee schedules where fees for each product are disclosed, the Commission is not requiring additional information to be disclosed concerning such fees, but rather, to promote accessibility of that information to readers of the conflicts disclosures, is requiring Participants to provide a specific location indicating where Participants currently disclose those fees.

[52] Notice, *supra* note 6, 85 FR at 2196.

nature of the affiliation.'' [53] Further, the Commission asked whether commenters ''believe that the proposed Processor questions effectively require all material facts necessary to not only identify the nature of the potential conflict, but also the effect it may have on the Plans'' and whether commenters believe the Amendments should ''elaborate on what 'profit or loss responsibility for a Participant's Proprietary Market Data products' means in the context of the required disclosures.'' [54]

The Commission did not receive any comments that specifically addressed the questions raised or alternatives suggested by the Commission, though the commenters discussed above supported enhanced disclosures for all Disclosing Parties.[55]

The Commission believes that it is appropriate to modify the required disclosures of the Processors to require more detailed disclosures relevant to potential conflicts of interest in a manner similar to the modifications it is making for the Administrator. As proposed, the disclosures for the Administrator and the Processor were substantively identical, and the Commission believes that modifying the Processor's disclosures to remain consistent with the Administrator's disclosures keeps with the intent of the proposed Amendments. Like the Administrator, the Processor also is responsible for Plan operations; as a result the proposed conflict of interest disclosures are similar. To keep those disclosures comparable, the Commission is making modifications to the required disclosures for Processors similar to the modifications it made for Administrators. First, the Commission is adding to the question requiring Processors to disclose whether they are is affiliated with any Participant additional language to require that the Processor must also ''describe the nature of the affiliation,'' identify the name of the affiliate, and ''[i]nclude an entity-level organizational chart depicting the Processor and its affiliates.'' The Commission believes that merely providing a name of an affiliate without disclosing how the two parties are related to each other is not sufficient. Many different levels of affiliation are possible, and the relationship between the Processor and a Participant is meaningful information that should be disclosed in order to allow the public to assess the impact of the affiliation on the potential conflicts the Processor may face when acting on behalf of the Plans.

In addition, the Commission is modifying the question that requires a narrative description of the functions performed by the manager to also require a similar description for ''senior staff'' that may be senior to the manager but that also provide services in the Processor capacity. By adding senior staff to that question, the disclosures will be able to provide more insight into the parties involved with the Processor function of the Plans including by those persons senior to, and with authority over, the manager.

Second, the Commission is adding to the question on whether the Processor provides any services to the Participant's proprietary market data products, and whether the Processor has profit or loss responsibility for that business, a further requirement for the Processor to disclose ''any other professional involvement with persons the Processor knows are engaged in'' the Participant's proprietary data business and to describe it. The information that a Processor obtains by virtue of its service to the Plan as the Processor can be sensitive non-public information of considerable commercial value. Even if the Processor does not have ''profit or loss responsibility'' for the Participant's proprietary data business, the Processor may have significant professional involvement with other people that do.[56] Any affiliated people in the Participant's proprietary data business with whom the Processor may interact may be incentivized to use information provided by the Processor to the competitive advantage of the Participant and to benefit the Participant's proprietary data business. The Commission therefore is modifying the question to elicit material information that is directly relevant to the potential conflicts of interest faced by the Processor if the Processor has involvement or contact with persons engaged in a Participant's proprietary market data business.

c. Administrators

In the Notice, the Commission asked whether commenters believe the proposed disclosure questions for Administrators ''are sufficient to identify the specific interests and employment, commercial or other relationships that may give rise to a conflict'' or whether more disclosures and more detailed items should be required.[57]

In response to the Notice, one commenter stated that the proposed disclosures for all Disclosing Parties, including the Administrators, were ''not completely sufficient to elicit the necessary information to provide insight into all potential conflicts for an individual'' and recommended that the disclosures be ''enhanced to elicit responses that provide detailed information about the nature of the conflict, including not only the general role of an individual, but also specific information about that individual's contractual requirements, compensation structures, resource allocations, and information access that may cause a perceived conflict.'' [58]

After considering the comments received in response to the Notice, the Commission believes it is appropriate to enhance the required disclosures of Administrators. The Commission is modifying the question about whether the Administrator is affiliated with a Participant in the same way that it modified the parallel question about the Processor and is making that modification for the same reasons. Specifically, the Commission is requiring Administrators that are affiliated with a Participant also (i) to ''describe the nature of the affiliation'' in addition to identifying the name of the affiliate, and (ii) to include ''an entity-level organizational chart depicting the Administrator and its affiliates.'' As is true for the disclosure applicable to the Processor, the Commission believes that merely providing the name of an affiliate without disclosing how the two parties are related to each other is not sufficient to identify what might give rise to a potential conflict of interest.

In addition, the Commission is modifying the question that requires a narrative description of the functions performed by the administrative services manager to also require a similar description for ''senior staff'' that may be senior to the administrative services manager but that also provide services in the Administrator capacity.

[53] *Id.*

[54] *Id.*

[55] *See, e.g.,* TD Ameritrade Letter, *supra* note 24, at 3–4.

[56] With respect to protecting the confidentiality of Plan-related information, the Commission separately is approving modified amendments to address the Plans' confidentiality policies. *See* Securities Exchange Act Release No. 88825 (May 6, 2020). The Commission does not believe that the separate confidentiality amendments obviate the need for these Amendments dealing with conflicts of interest. Rather, the Commission believes that both sets of amendments complement each other and take an important first step towards strengthening the Plans' ability to protect against the potential misuse of confidential Plan information while addressing the potential conflicts of interest inherent in Plan governance.

[57] Notice, *supra* note 6, 85 FR at 2195.

[58] TD Ameritrade Letter, *supra* note 24, at 3–4.

By adding senior staff to that question, the disclosures will be able to provide more insight into the parties involved with the administration of the Plans including by those persons senior to, and with authority over, the manager. Further, the Commission is modifying the question that requires disclosure of whether the Plan Administrator has profit or loss responsibility for a Participant's proprietary market data products to also encompass ''licensing responsibility'' for the same to require disclosure of whether the Administrator performs the central task of licensing for the Participant's proprietary market data products, which would overlap substantially with the Administrator's licensing responsibility to a similar customer base. Finally, for the same reasons discussed above for Processors, the Commission is adding to that same question a further requirement for the Administrator to disclose ''any other professional involvement with persons the Administrator knows are engaged in'' the Participant's proprietary data business and to describe it. This change harmonizes the same question asked of both the Processors and Administrators, who are similarly situated in when it comes to involvement or contact with persons engaged in a Participant's proprietary market data business.

Administrators have access to highly sensitive and commercially valuable non-public information that would be of substantial value to a Participant's proprietary data business. For example, access to the SIP customer lists that an Administrator has through its responsibilities to the Plans would be very valuable to a Participant. If the staff associated with the Administrator has access to that information and also bears responsibility for the Participant's proprietary market data products, the potential conflict of interest is considerable and should be disclosed. The Commission believes that these modifications to the disclosures applicable to the Administrator are appropriate to provide insight into some of the key potential conflicts of interest faced by the Administrator.[59]

d. Catch-All Question

In the Notice, the Commission solicited comment on whether the Amendments would elicit the information necessary to provide sufficient transparency of the potential conflicts of interest faced by parties involved with operating and overseeing the Plans. Among other things, the Commission asked whether commenters ''believe that the Plans should require additional public disclosures of any personal, business, or financial interests, and any employment or other commercial relationships that could materially affect the ability of a party to be impartial regarding actions of the Plans.'' [60]

In response to the Notice, one commenter suggested that all parties disclose ''any additional relationships, whether personal, employment, or commercially related, which may present a perceived or actual conflict of interest with their assigned role(s) for the Plan(s).'' [61]

After considering the comments received in response to the Notice, the Commission believes it is appropriate to modify the Amendments to include a ''catch-all'' question for each Disclosing Party. The catch-all question asks whether the Disclosing Party or its representative ''have any additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with their responsibilities to the Plan'' and, if so, ''provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.'' [62] This catch-all question would require disclosure of any other relationships or material economic interests, such as employment, financial, or commercial arrangements, not otherwise discussed in the disclosures, but which a reasonable objective observer could perceive as presenting a potential conflict.

The Commission believes that the catch-all question is appropriate as it elicits information broadly on Disclosing Parties and their representatives, which is designed to ensure that no relevant connections are omitted in the disclosures. Further, by covering additional relationships or material economic interests, the catch-all question is designed to ensure that the disclosures have not omitted any other sources of potential conflicts that could affect the Plans. Disclosure of this information may provide valuable insight into potential conflicts that would not otherwise be disclosed and the circumstances behind a potential conflict.

B. Review of the Disclosures

In the Notice, the Commission solicited comment on whether a disclosure-based regime is sufficient to address the potential conflicts that Participants, Processors, Administrators, and members of the Advisory Committee may face in their roles within the Plan and whether additional steps are necessary. One additional step the Commission highlighted is the role of the Operating Committee in the disclosure regime. Among other questions, the Commission asked whether commenters believe ''that Operating Committee members should be permitted to raise the issue of a potential conflict of interest of another Participant for discussion before the Operating Committee, even if the Participant did not itself disclose the potential conflict'' and whether the Operating Committee ''should have the ability to take action in response to disclosed or undisclosed conflicts . . . .''

In response to the Notice, one commenter suggested that the Plans should alleviate potential conflicts of interest by ''implementing a formal procedure for evaluating disclosures and making an explicit determination regarding whether the potential conflicts disclosed will, in perception or fact, impede that individual's ability to fulfill their role for the Plan(s).'' [63]

After considering the comments received, the Commission is not modifying the Amendments to institute a formal review process for the disclosures. The disclosures will continue to be publicly posted, and the Participants, Advisors, and others will be able to continue to review the disclosures and amendments thereto. To the extent a party believes that a

[59] The Commission believes it is appropriate for the Administrator to make the required disclosures even if it is independent and not owned or controlled by a corporate entity that offers for sale its own proprietary market data product, either directly or via another subsidiary, for the same reasons that other independent parties (*e.g.,* Advisors and service providers) are required to make the disclosures. Among other things, the Administrator's disclosures contain important information about any services provided to Participants' proprietary market data products, policies and procedures to safeguard confidential information, and the catch-all question about additional relationships or material economic interests. *See* Securities Exchange Act Release No. 88827 (May 6, 2020) (ordering the Participants to act jointly in developing and filing with the Commission a proposed new single national market system plan that would, among other things, require an independent Administrator).

[60] Notice, *supra* note 6, 85 FR at 2195–96.

[61] TD Ameritrade Letter, *supra* note 24, at 6. *See also supra* text accompanying note 40 (discussing TD Ameritrade Letter); and Healthy Markets Letter, *supra* note 42, at 18 (stating that the disclosures should be expanded to ''disclose any personal, organizational, or financial relationships'').

[62] For Disclosing Parties that are Participants, the catch-all question extends to an ''alternative representative'' and ''any affiliate'' of the Participant. For Disclosing Parties that are Advisors, the catch-all question extends to the ''Advisor's firm.'' These additions capture specific parties that are unique and relevant to the Participants and Advisors for purposes of the Amendments.

[63] TD Ameritrade Letter, *supra* note 24, at 4.

Disclosing Party has not adequately responded to a particular disclosure item or has not clearly explained the necessary information to disclose a potential conflict, the Commission would encourage Disclosing Parties and other individuals to bring such concerns to the attention of the Operating Committee for its consideration, as Participants would have an interest in promoting a high standard for the disclosures that is consistently applied across all Disclosing Parties. The Commission encourages the Participants to consider further whether to propose a formal review process with appropriate consequences for violations.

C. Recusal

In the Notice, the Commission solicited comment on whether additional steps, including recusal, are necessary to address the potential conflicts that arise in connection with the operation and oversight of the Plans. Among other questions, the Commission asked whether commenters ''believe that a Participant should be recused from voting when it or an affiliate is competing for a contract to serve as a Processor for the Plans.'' [64] The Commission asked whether recusal is ''an appropriate mechanism to address conflicts'' and, if so, whether it should be mandatory or voluntary.[65] The Commission also asked whether ''the Operating Committee should have the ability to take action in response to disclosed or undisclosed conflicts, such as requiring the Participant to recuse itself from a certain discussion or vote on a particular matter.'' [66]

In response to the Notice, the Advisory Committee supports a ''requirement for individuals to recuse themselves from discussions and/or voting when there is a material conflict between the requirement to further the goals of the plan and the specific interest of the individual or their employer.'' [67] In particular, the Advisory Committee recommended mandatory recusal in situations ''regarding processor bids or voting to choose a processor, when the individual's firm is bidding for the processor role.'' [68] The Advisory Committee further suggested that recusal be required when ''either (i) the individual, acting in good faith, or (ii) the Operating Committee, by majority vote, determines that such individual has a material conflict.'' [69]

Another commenter similarly stated that there should be a mechanism for recusal when a ''conflict becomes material,'' such as when the ''Operating Committee is considering selection of a service provider for a SIP, and the participant's firm has a relationship with a bidder.'' [70] The commenter recommended that there should be a ''mechanism for responding to a participant's failure to comply with the disclosure requirement including, if appropriate, dismissal from the Operating Committee.'' [71]

A third commenter suggested that ''there should be a mechanism or process whereby recusal is required from discussion and voting in case of a material conflict of interest.'' [72] The commenter recommended requiring recusal when ''a Participant exchange, or Advisory Committee member's employer could be competing to be a service provider to the Plans such as processor, or auditor.'' [73]

One commenter asserted that ''[d]isclosure of potential conflicts in and of itself does not necessarily mitigate any such conflict or the perception of such conflict.'' [74] The commenter suggested that ''[e]ffectively addressing an individual's conflict of interest, whether perceived or in fact, includes mitigating and/or removing such conflict.'' [75] This commenter advocated for a recusal policy with review of disclosures by a committee composed of both SRO and non-SRO members, guidance from Plan legal counsel, and a vote by the committee.[76] The commenter suggested that individuals may be required to recuse themselves for certain topics or for the tenure of their term depending on the severity of the conflict.[77]

After considering the comments received in response to the Notice, the Commission believes it is appropriate to require mandatory recusal in certain situations. To promote transparency when recusals occur, new Section (f)(2)(iv) of the CTA Plan (Section (e)(2)(iv) of the CQ Plan) requires that all recusals, including a person's determination of whether to voluntarily recuse himself or herself, be reflected in the applicable meeting minutes. Increased transparency of recusals will allow the public to assess whether Plan decisions have, or have not, been informed by persons subject to potential conflicts of interest.

With respect to specific recusals, the Commission is adding new Section (f)(2)(i) of the CTA Plan (Section (e)(2)(i) of the CQ Plan) to specify that a Disclosing Party ''may not appoint as its representative a person that is responsible for or involved with the development, modeling, pricing, licensing, or sale of proprietary data products offered to customers of a securities information processor if the person has a financial interest (including compensation) that is tied directly to the exchange's proprietary data business and if that compensation would cause a reasonable objective observer to expect the compensation to affect the impartiality of the representative.'' To the extent an exchange that offers proprietary market data products appoints as its representative to the Plans such an individual, that person has an inherent conflict of interest arising from his or her financial interest in the exchange's proprietary data business.

The effect of this requirement is that a Participant will not be able to appoint as its representative a person that has a financial interest (including

[64] Notice, *supra* note 6, 85 FR at 2196.

[65] *Id.*

[66] *Id.*

[67] Advisory Committee Letter, *supra* note 23, at 2.

[68] *Id. See also* Healthy Markets Letter, *supra* note 42, at 14 (recommending detailed recusal provisions that preclude a person ''from voting on any matter that directly impacts its costs or revenues, or those of its affiliates''); and Letter from John Ramsay, Chief Market Policy Officer, Investors Exchange LLC, to Vanessa Countryman, Secretary, Commission, dated March 4, 2020 (submitted in response to Release No. 34–87906; File No. 4–757).

[69] Advisory Committee Letter, *supra* note 23, at 2.

[70] RBC Letter, *supra* note 46, at 3. *See also* Letter from Rich Steiner Head of Client Advocacy and Market Information, RBC Capital Markets, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 (submitted in response to Release No. 34–87906; File No. 4–757), at 4 (discussing the need for disclosure of material information, and citing as an example when a Participant has a relationship with a person bidding for a contract with the Plans). As discussed above, the Commission is modifying the Amendments to require a Participant's recusal from voting on matters in which it or its affiliate (i) is seeking a position or contract with the Plan or (ii) has a position or contract with the Plan and whose performance is being evaluated by the Plan. The commenter also believed that the Advisory Committee members should only provide the disclosures on a voluntary basis as they do not currently have voting rights, such that the disclosures should only be mandatory for voting members of the Operating Committee. *See id.* at 2. The Commission, however, believes that Advisors, because they are engaged in Plan business, just like other Disclosing Parties engaged in Plan business, should be required to make the mandatory conflicts of interest disclosures. With such disclosures, other Disclosing Parties and the public can assess whether the Advisors are subject to any conflicts as they carry out their responsibilities with the Plans.

[71] RBC Letter, *supra* note 46, at 3.

[72] Charles Schwab Letter, *supra* note 41, at 4. The commenter stated that ''only a complete separation of functions—true independence—of the Participants from the Administrators and Processors can mitigate the conflict.'' *Id.* The Commission believes that the modifications made are appropriate for these Amendments and is not including this requirement in the Amendments.

[73] *Id.*

[74] TD Ameritrade Letter, *supra* note 24, at 3.

[75] *Id.*

[76] *See id.* at 4.

[77] *See id.*

compensation) that is tied directly to the Participant's proprietary data business if that compensation would cause a reasonable objective observer to expect the compensation to affect the impartiality of the representative. For example, if a person's primary job function is tied directly to the success or growth of proprietary data products, and/or some percentage of a person's compensation is tied directly to the revenues or profits specifically of the exchange's proprietary data business (as opposed to being tied more generally to the Participant's overall revenue), that person could not serve as the Participant's representative if that compensation would cause a reasonable objective observer to expect the compensation to affect the impartiality of the representative. If such person currently serves as the Participant's representative, that person could either no longer serve as the Participant's representative or no longer have such a financial interest that is tied directly to the exchange's proprietary data business.[78]

The Commission believes that the exchanges' commercial interests in their proprietary data businesses, as well as the exchange Administrators' access to confidential subscriber information, create a potential conflict of interest that could influence decisions as to the Plans' operation. In the case where a Participant chooses as its representative a person who has a financial interest (including compensation) that is tied directly to the exchange's proprietary data business, then a reasonable objective observer could question whether the representative is able to act in a manner consistent with the interests of the Plans.[79] In light of this conflict, even if such individuals have the requisite expertise, the Commission believes that it is appropriate to prohibit a Disclosing Party from appointing such individuals as its representative to the Plans.[80]

The Commission is further modifying Section (f)(2) of the CTA Plan (Section (e)(2) of the CQ Plan) by setting forth the following scenarios in which recusal will be required. First, a Disclosing Party will be ''recused from participating in Plan activities if it has not submitted a required disclosure form or the Operating Committee votes that its disclosure form is materially deficient.'' [81] Such recusal will be in effect until the Disclosing Party submits a sufficiently complete disclosure form to the Administrator. Consistent with the comments discussed above, this provision imposes a mechanism to recuse a representative due to a Disclosing Party's complete failure to comply with the disclosure requirements. For other cases where the disclosures are made but found to be materially deficient by vote of the Operating Committee, recusal also would be appropriate as an incentive for Disclosing Parties to carefully prepare their disclosures and ensure that they are not materially deficient.

In either case, these bases for recusal could be readily cured by the recused party submitting a new or updated disclosure that is complete in providing responses to all required items. Thus, the recusal could be lifted by the party's submission of an updated disclosure, though the Operating Committee could potentially again vote that the disclosure form is materially deficient if it decides the Disclosing Party did not rectify the material deficiency. The Commission believes that these requirements provide a consequence for failure to file a required disclosure or for filing a disclosure that the Operating Committee votes to be materially deficient, and therefore should promote both timely filings and consistency in the quality of disclosures across Disclosing Parties.

Second, the Commission is adopting a requirement for a Disclosing Party to be recused from voting on matters, in which it or its affiliate (i) is seeking a position or contract with the Plan or (ii) has a position or contract with the Plan and whose performance is being evaluated by the Plan. In both cases, the Commission believes recusal is appropriate because the conflict of interest, real or perceived, between the Disclosing Party's interests and the interest of the Plan would be so material and potentially irreconcilable that a reasonable objective observer would question the party's ability to be impartial and not favor its own interests. Exchanges face considerable potential conflicts as a result of their dual role of serving, or competing to serve, as operators of the SIPs while simultaneously serving as a Participant that participates in the discussion of, and ultimately votes on, the selection and performance of such parties. The Commission believes that recusal in those situations is appropriate because the conflict of interest in those scenarios is so pronounced, and the Disclosing Party and its affiliates are so materially conflicted, that their participation and vote on the matter cannot be impartial and additional measures are needed in those scenarios.

IV. Commission Findings

For the reasons discussed throughout, the Commission finds that the proposed Amendments to the Plans, as modified by the Commission, are consistent with the requirements of the Act and the rules and regulations thereunder, and in particular, Section 11A of the Act [82] and Rule 608 [83] thereunder in that they are necessary or appropriate in the public interest, for the protection of investors and the maintenance of fair and order markets, to remove impediments to, and perfect the mechanisms of, a national market system.

Section 11A of the Act [84] sets forth Congress' finding that it is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to ensure the prompt, accurate, reliable and fair collection, processing, distribution, and publication of information with respect to quotations for and transactions in such securities and the fairness and usefulness of the form and content of such information. The conflicts of interest Amendments, as modified by the Commission, further these goals set forth by Congress.

[78] This requirement is not designed to impact or reduce the amount of any person's overall compensation, but rather to ensure that the Participants do not choose as their representatives individuals who receive compensation that is directly linked to proprietary market data products.

[79] For example, a Participant's representative whose compensation is tied directly to the Participant's proprietary market data business could face a conflict of interest that is not possible to sufficiently mitigate when working on Plan initiatives that could potentially result in lower revenues for the Participant's proprietary data business, such as SIP fee reductions or expansions in SIP core data content that match what the Participant provides in some of its proprietary market data products. Those Plan initiatives could result in lower revenues for the Participant's proprietary data business, which would correspondingly reduce the representative's compensation that is tied directly to that business.

[80] While a Participant could not appoint such person as its representative to the Plans, it could utilize such person in other capacities involving Plan business, such as the Processor role.

[81] While the Operating Committee does not have an affirmative responsibility to review each disclosure document and updates thereto in the ordinary course, it may elect to do so, including, for example, in instances where it has reason to suspect a disclosure may be materially deficient, and the Operating Committee may determine the best procedure for undertaking or completing such a review. The ability of the Operating Committee to undertake this review and vote on the matter is appropriate as a mechanism to ensure that Disclosing Parties submit clear and complete disclosures.

[82] 15 U.S.C. 78k–1.

[83] 17 CFR 240.608.

[84] 15 U.S.C. 78k–1(c)(1)(B).

V. Conclusion

It is Therefore Ordered, pursuant to Section 11A of the Act,[85] and the rules thereunder, that the proposed Amendments to the CTA and CQ Plans (File No. SR–CTA/CQ–2019–01), as modified by the Commission, are approved.

By the Commission.

J. Matthew DeLesDernier,

Assistant Secretary.

Exhibit A: Marked To Show Changes From the Proposal

The Commission's additions are *italicized;* deletions are [bracketed].

CTA PLAN

IV. Administration of the CTA Plan

(a)–(e) No change.

(f) [Disclosure of]Potential Conflicts of Interests

(1) Disclosure Requirements. The Participants, the Processor, the Plan Administrator, [and]members of the Advisory Committee*, and each service provider or subcontractor engaged in Plan business (including the audit of subscribers' data usage) that has access to Restricted or Highly Confidential Plan information* (for purposes of this section, ''Disclosing Parties'') shall complete the applicable questionnaire [attached to this CTA Plan as Exhibit F]*to provide the required disclosures set forth below to disclose all material facts necessary to identify potential conflicts of interest. The Operating Committee, a Participant, Processor, or Administrator may not use a service provider or subcontractor on Plan business unless that service provider or subcontractor has agreed in writing to provide the disclosures required by this section and has submitted completed disclosures to the Administrator prior to starting work. If state laws, rules, or regulations, or applicable professional ethics rules or standards of conduct, would act to restrict or prohibit a Disclosing Party from making any particular required disclosure, a Disclosing Party shall refer to such law, rule, regulation, or professional ethics rule or standard and include in response to that disclosure the basis for its inability to provide a complete response. This does not relieve the Disclosing Party from disclosing any information it is not restricted from providing.*

(i) A potential conflict of interest may exist when personal, business, financial, or employment relationships could be perceived by a reasonable objective observer to affect the ability of a person to be impartial.

[(2)]*(ii)* Updates to Disclosures. Following a material change in the information disclosed pursuant to subparagraph (f)(1), a Disclosing Party shall promptly update its disclosures. Additionally, a Disclosing Party shall update annually any inaccurate information prior to the Operating Committee's first quarterly meeting of a calendar year.

[(3)]*(iii)* Public Dissemination of Disclosures. The Disclosing Parties shall provide the Administrator with its disclosures and any required updates. The Administrator shall ensure that the disclosures are promptly posted to the Plan's website.

(2) Recusal

(i) A Disclosing Party may not appoint as its representative a person that is responsible for or involved with the development, modeling, pricing, licensing, or sale of proprietary data products offered to customers of a securities information processor if the person has a financial interest (including compensation) that is tied directly to the exchange's proprietary data business and if that compensation would cause a reasonable objective observer to expect the compensation to affect the impartiality of the representative.

(ii) A Disclosing Party (including its representative(s), employees, and agents) will be recused from participating in Plan activities if it has not submitted a required disclosure form or the Operating Committee votes that its disclosure form is materially deficient. The recusal will be in effect until the Disclosing Party submits a sufficiently complete disclosure form to the Administrator.

(iii) A Disclosing Party, including its representative(s), and its affiliates and their representative(s), are recused from voting on matters in which it or its affiliate (i) are seeking a position or contract with the Plan or (ii) have a position or contract with the Plan and whose performance is being evaluated by the Plan.

(iv) All recusals, including a person's determination of whether to voluntarily recuse himself or herself, shall be reflected in the meeting minutes.

* * * * *

CQ PLAN

IV. Administration of the CQ Plan

(a)–(d) No change.

(e) [Disclosure of]Potential Conflicts of Interests

(1) Disclosure Requirements. The Participants, the Processor, the Plan Administrator, [and]members of the Advisory Committee*, and each service provider or subcontractor engaged in Plan business (including the audit of subscribers' data usage) that has access to Restricted or Highly Confidential Plan information* (for purposes of this section, ''Disclosing Parties'') shall complete the applicable questionnaire [attached to this CQ Plan as Exhibit E]*to provide the required disclosures set forth below to disclose all material facts necessary to identify potential conflicts of interest. The Operating Committee, a Participant, Processor, or Administrator may not use a service provider or subcontractor on Plan business unless that service provider or subcontractor has agreed in writing to provide the disclosures required by this section and has submitted completed disclosures to the Administrator prior to starting work. If state laws, rules, or regulations, or applicable professional ethics rules or standards of conduct, would act to restrict or prohibit a Disclosing Party from making any particular required disclosure, a Disclosing Party shall refer to such law, rule, regulation, or professional ethics rule or standard and include in response to that disclosure the basis for its inability to provide a complete response. This does not relieve the Disclosing Party from disclosing any information it is not restricted from providing.*

(i) A potential conflict of interest may exist when personal, business, financial, or employment relationships could be perceived by a reasonable objective observer to affect the ability of a person to be impartial.

[(2)]*(ii)* Updates to Disclosures. Following a material change in the information disclosed pursuant to subparagraph (e)(1), a Disclosing Party shall promptly update its disclosures. Additionally, a Disclosing Party shall update annually any inaccurate information prior to the Operating Committee's first quarterly meeting of a calendar year.

[(3)]*(iii)* Public Dissemination of Disclosures. The Disclosing Parties shall provide the Administrator with its disclosures and any required updates. The Administrator shall ensure that the disclosures are promptly posted to the Plan's website.

(2) Recusal

(i) A Disclosing Party may not appoint as its representative a person that is responsible for or involved with the development, modeling, pricing, licensing, or sale of proprietary data products offered to customers of a securities information processor if the person has a financial interest (including compensation) that is tied

[85] 15 U.S.C. 78k–1.

directly to the exchange's proprietary data business and if that compensation would cause a reasonable objective observer to expect the compensation to affect the impartiality of the representative.

(ii) A Disclosing Party (including its representative(s), employees, and agents) will be recused from participating in Plan activities if it has not submitted a required disclosure form or the Operating Committee votes that its disclosure form is materially deficient. The recusal will be in effect until the Disclosing Party submits a sufficiently complete disclosure form to the Administrator.

(iii) A Disclosing Party, including its representative(s), and its affiliates and their representative(s), are recused from voting on matters in which it or its affiliate (i) are seeking a position or contract with the Plan or (ii) have a position or contract with the Plan and whose performance is being evaluated by the Plan.

(iv) All recusals, including a person's determination of whether to voluntarily recuse himself or herself, shall be reflected in the meeting minutes.

* * * * *

Required Disclosures for CTA Plan

As part of the disclosure regime, [the Participants propose that]the Participants, the Processors, the Administrators, [and]members of the Advisory Committee*, and service providers and subcontractors must* respond to questions that are tailored to elicit responses that disclose the potential conflicts of interest.

The [Participants propose that the]Participants *must* respond to the following questions and instructions:

- Is the Participant's firm for profit or not-for-profit? If the Participant's firm is for profit, is it publicly or privately owned? If privately owned, list any owner with an interest of 5% or more of the Participant, where to the Participant's knowledge, such owner, or any affiliate controlling, controlled by, or under common control with the owner, subscribes, directly or through a third-party vendor, to SIP and/or exchange Proprietary Market Data products.
- Does the Participant firm offer real-time proprietary equity market data that is filed with the SEC (''Proprietary Market Data'')? If yes, *list each product, describe its content, and provide a link to where fees for each product are disclosed.*[does the firm charge a fee for such offerings?]
- Provide the names of the representative and any alternative representatives designated by the Participant who are authorized under the Plans to vote on behalf of the Participant. Also provide a narrative description of the representatives' roles within the Participant organization, including the title of each individual as well as any direct responsibilities related to the development, dissemination, sales, or marketing of the Participant's Proprietary Market Data, and the nature of those responsibilities *sufficient for the public to identify the nature of any potential conflict of interest that could be perceived by a reasonable objective observer as having an effect on the Plan. If the representative works in or with the Participant's Proprietary Market Data business, describe the representative's roles and describe how that business and the representative's Plan responsibilities impacts his or her compensation. In addition, describe how a representative's responsibilities with the Proprietary Market Data business may present a conflict of interest with his or her responsibilities to the Plan.*
- *Does the Participant, its representative or its alternative representative, or any affiliate have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with their responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

The [Participants propose that the]Processors *must* respond to the following questions and instructions:

- Is the Processor an affiliate of or affiliated with any Participant? If yes, disclose the Participant(s) *and describe the nature of the affiliation. Include an entity-level organizational chart depicting the Processor and its affiliates.*[?]
- Provide a narrative description of the functions directly performed by *senior staff,* the manager employed by the Processor to provide Processor services to the Plans, and the staff that reports to that manager (collectively, the ''Plan Processor'').
- Does the Plan Processor provide any services for any Participant's Proprietary Market Data products or other Plans? If Yes, disclose the services the Plan Processor performs and identify which Plans. Does the Plan Processor have any profit or loss responsibility for a Participant's Proprietary Market Data products *or any other professional involvement with persons the Processor knows are engaged in the Participant's Proprietary Market Data business*? *If so, describe.*
- List the policies and procedures established to safeguard confidential Plan information that is applicable to the Plan Processor.
- *Does the Processor, or its representatives, have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with the representatives' responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

The [Participants propose that the]Administrators *must* respond to the following questions and instructions:

- Is the Administrator an affiliate of or affiliated with any Participant? If yes, *disclose the*[which] Participant*(s) and describe the nature of the affiliation. Include an entity-level organizational chart depicting the Administrator and its affiliates.*[?]
- Provide a narrative description of the functions directly performed by *senior staff, the* administrative services manager, and the staff that reports to that manager (collectively, the ''Plan Administrator'').
- Does the Plan Administrator provide any services for any Participant's Proprietary Market Data products? If yes, what services? Does the Plan Administrator have any profit or loss responsibility*, or licensing responsibility,* for a Participant's Proprietary Market Data products *or any other professional involvement with persons the Administrator knows are engaged in the Participant's Proprietary Market Data business*? *If so, describe.*
- List the policies and procedures established to safeguard confidential Plan information that is applicable to the Plan Administrator.
- *Does the Administrator, or its representatives, have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with the representatives' responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

The [Participants propose that the]Members of the Advisory Committee *must* respond to the following questions and instructions:

- Provide the Advisor's title and a brief description of the Advisor's role within the firm.

• Does the Advisor have responsibilities related to the firm's use or procurement of market data?

• Does the Advisor have responsibilities related to the firm's trading or brokerage services?

• Does the Advisor's firm use the SIP? Does the Advisor's firm use exchange Proprietary Market Data products?

• Does the Advisor's firm have an ownership interest of 5% or more in one or more Participants? If yes, list the Participant(s).

• Does the Advisor actively participate in any litigation against the Plans?

• *Does the Advisor or the Advisor's firm have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with their responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

Pursuant to Section IV(f)(1) of the Plan, each service provider or subcontractor that has agreed in writing to provide required disclosures and be treated as a Disclosing Party pursuant to Section IV(f) of the Plan shall respond to the following questions and instructions:

• *Is the service provider or subcontractor affiliated with a Participant, Processor, Administrator, or member of the Advisory Committee? If yes, disclose with whom the person is affiliated and describe the nature of the affiliation.*

• *If the service provider's or subcontractor's compensation is on a commission basis or is tied to specific metrics, provide a detailed narrative summary of how compensation is determined for performing work on behalf of the Plan.*

• *Is the service provider or subcontractor subject to policies and procedures (including information barriers)* concerning the protection of confidential *information that includes affiliates? If so, describe. If not, explain their absence.*

• *Does the service provider or subcontractor, or its representative, have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with its responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

The [Participants will post the]responses to these questions *will be posted* on the Plan's website. If a Disclosing Party has any material changes in its responses, the Disclosing Party must promptly update its disclosures. Additionally, the Disclosing Parties *must*[will] update the disclosures on an annual basis to reflect any changes. This annual update must be made before the first quarterly session meeting of each calendar year, which is generally held in mid-February.

* * * * *

Required Disclosures for CQ Plan

As part of the disclosure regime, [the Participants propose that]the Participants, the Processors, the Administrators, [and]members of the Advisory Committee*, and service providers and subcontractors must* respond to questions that are tailored to elicit responses that disclose the potential conflicts of interest.

The [Participants propose that the]Participants *must* respond to the following questions and instructions:

• Is the Participant's firm for profit or not-for-profit? If the Participant's firm is for profit, is it publicly or privately owned? If privately owned, list any owner with an interest of 5% or more of the Participant, where to the Participant's knowledge, such owner, or any affiliate controlling, controlled by, or under common control with the owner, subscribes, directly or through a third-party vendor, to SIP and/or exchange Proprietary Market Data products.

• Does the Participant firm offer real-time proprietary equity market data that is filed with the SEC (''Proprietary Market Data'')? If yes, *list each product, describe its content, and provide a link to where fees for each product are disclosed.*[does the firm charge a fee for such offerings?]

• Provide the names of the representative and any alternative representatives designated by the Participant who are authorized under the Plans to vote on behalf of the Participant. Also provide a narrative description of the representatives' roles within the Participant organization, including the title of each individual as well as any direct responsibilities related to the development, dissemination, sales, or marketing of the Participant's Proprietary Market Data, and the nature of those responsibilities *sufficient for the public to identify the nature of any potential conflict of interest that could be perceived by a reasonable objective observer as having an effect on the Plan. If the representative works in or with the Participant's Proprietary Market Data business, describe the representative's roles and describe how that business and the representative's Plan responsibilities impacts his or her compensation. In addition, describe how a representative's responsibilities with the Proprietary Market Data business may present a conflict of interest with his or her responsibilities to the Plan.*

• *Does the Participant, its representative or its alternative representative, or any affiliate have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with their responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

The [Participants propose that the]Processors *must* respond to the following questions and instructions:

• Is the Processor an affiliate of or affiliated with any Participant? If yes, disclose the Participant(s) *and describe the nature of the affiliation. Include an entity-level organizational chart depicting the Processor and its affiliates.*[?]

• Provide a narrative description of the functions directly performed by *senior staff,* the manager employed by the Processor to provide Processor services to the Plans, and the staff that reports to that manager (collectively, the ''Plan Processor'').

• Does the Plan Processor provide any services for any Participant's Proprietary Market Data products or other Plans? If Yes, disclose the services the Plan Processor performs and identify which Plans. Does the Plan Processor have any profit or loss responsibility for a Participant's Proprietary Market Data products *or any other professional involvement with persons the Processor knows are engaged in the Participant's Proprietary Market Data business*? *If so, describe.*

• List the policies and procedures established to safeguard confidential Plan information that is applicable to the Plan Processor.

• *Does the Processor, or its representatives, have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with the representatives' responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential*

conflicts of interest and the effects they may have on the Plan.

The [Participants propose that the]Administrators *must* respond to the following questions and instructions:

• Is the Administrator an affiliate of or affiliated with any Participant? If yes, *disclose the*[which] Participant*(s) and describe the nature of the affiliation. Include an entity-level organizational chart depicting the Administrator and its affiliates.*[?]

• Provide a narrative description of the functions directly performed by *senior staff, the* administrative services manager, and the staff that reports to that manager (collectively, the ''Plan Administrator'').

• Does the Plan Administrator provide any services for any Participant's Proprietary Market Data products? If yes, what services? Does the Plan Administrator have any profit or loss responsibility*, or licensing responsibility,* for a Participant's Proprietary Market Data products *or any other professional involvement with persons the Administrator knows are engaged in the Participant's Proprietary Market Data business*? *If so, describe.*

• List the policies and procedures established to safeguard confidential Plan information that is applicable to the Plan Administrator.

• *Does the Administrator, or its representatives, have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with the representatives' responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

The [Participants propose that the]Members of the Advisory Committee *must* respond to the following questions and instructions:

• Provide the Advisor's title and a brief description of the Advisor's role within the firm.

• Does the Advisor have responsibilities related to the firm's use or procurement of market data?

• Does the Advisor have responsibilities related to the firm's trading or brokerage services?

• Does the Advisor's firm use the SIP? Does the Advisor's firm use exchange Proprietary Market Data products?

• Does the Advisor's firm have an ownership interest of 5% or more in one or more Participants? If yes, list the Participant(s).

• Does the Advisor actively participate in any litigation against the Plans?

• *Does the Advisor or the Advisor's firm have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with their responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

Pursuant to Section IV(e)(1) of the Plan, each service provider or subcontractor that has agreed in writing to provide required disclosures and be treated as a Disclosing Party pursuant to Section IV(e) of the Plan shall respond to the following questions and instructions:

• *Is the service provider or subcontractor affiliated with a Participant, Processor, Administrator, or member of the Advisory Committee? If yes, disclose with whom the person is affiliated and describe the nature of the affiliation.*

• *If the service provider's or subcontractor's compensation is on a commission basis or is tied to specific metrics, provide a detailed narrative summary of how compensation is determined for performing work on behalf of the Plan.*

• *Is the service provider or subcontractor subject to policies and procedures (including information barriers)* concerning the protection of confidential *information that includes affiliates? If so, describe. If not, explain their absence.*

• *Does the service provider or subcontractor, or its representative, have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with its responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

The [Participants will post the]responses to these questions *will be posted* on the Plan's website. If a Disclosing Party has any material changes in its responses, the Disclosing Party must promptly update its disclosures. Additionally, the Disclosing Parties *must*[will] update the disclosures on an annual basis to reflect any changes. This annual update must be made before the first quarterly session meeting of each calendar year, which is generally held in mid-February.

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88819; File No. SR–IEX–2020–06]

Self-Regulatory Organizations; Investors Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Modify the IEX Fee Schedule, Pursuant to IEX Rule 15.110(a) and (c), To Clarify the Circumstances in Which IEX Offers Certain Physical Port Connections

May 6, 2020.

Pursuant to Section 19(b)(1) [1] of the Securities Exchange Act of 1934 (the ''Act'') [2] and Rule 19b-4 thereunder,[3] notice is hereby given that, on April 22, 2020, the Investors Exchange LLC (''IEX'' or the ''Exchange'') filed with the Securities and Exchange Commission (the ''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. 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

Pursuant to the provisions of Section 19(b)(1) under Act,[4] and Rule 19b–4 thereunder,[5] IEX is filing with the Commission a proposed rule change to modify its Fee Schedule, pursuant to IEX Rule 15.110(a) and (c), to clarify the circumstances in which IEX offers certain physical port connections. The Exchange has designated this rule change as ''non-controversial'' under Section 19(b)(3)(A) of the Act [6] and provided the Commission with the notice required by Rule 19b–4(f)(6) thereunder.[7]

The text of the proposed rule change is available at the Exchange's website at *www.iextrading.com,* at the principal office of the Exchange, 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 self-regulatory organization included statements concerning the purpose of and basis for the proposed rule change

[1] 15 U.S.C. 78s(b)(1).
[2] 15 U.S.C. 78a.
[3] 17 CFR 240.19b–4.
[4] 15 U.S.C. 78s(b)(1).
[5] 17 CFR 240.19b–4.
[6] 15 U.S.C. 78s(b)(3)(A).
[7] 17 CFR 240.19b–4.

and discussed any comments it received on the proposed rule change. The text of these statement may be examined at the places specified in Item IV below. The self-regulatory organization 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 proposes to modify its Fee Schedule, pursuant to IEX Rule 15.110(a) and (c), to clarify the circumstances in which IEX offers certain physical port connections. Specifically, the Exchange proposes to add two footnotes to its Fee Schedule to clarify that 10 gigabit (''10G'') physical connections are available to connect to both its production and test systems, but 1 gigabit (''1G'') physical connections are only available to connect to its test system. IEX will continue to offer all physical connections to the Exchange free of charge.

IEX is proposing this change to its Fee Schedule in order to more clearly denote the various ways market participants can connect to the Exchange. IEX, like all securities exchanges, offers its Members [8] physical connections (also called ''physical ports'') through which Members may ''plug in'' to the Exchange.[9] These physical ports come in several forms that offer different amounts of bandwidth into the Exchange's network. IEX offers two types of physical ports: Either a 1G or 10G interface.[10] 10G physical ports are ten times faster than 1G physical ports. IEX offers 10G physical ports only to connect to the IEX point-of-presence (''IEX POP'') and Disaster Recovery data centers (collectively the ''Production Systems'').[11] 1G physical ports are the default interface to the IEX Test Facility (''ITF''), which is not as bandwidth or latency sensitive as the Production Systems, but 10G physical ports are also available to connect to the ITF.[12] IEX offers all physical ports free of charge, but the current IEX Fee Schedule does not specify which physical ports are used to connect to the Production Systems or the ITF.[13]

Therefore, the Exchange proposes to add two clarifying footnotes to the ''Connectivity Fees'' section of the IEX Fee Schedule. The first footnote, after the words ''10G Physical Port,'' states that ''10G physical ports are available to connect to IEX's production systems (*i.e.,* the IEX POP and Disaster Recovery Data Centers) and the IEX Test Facility ('ITF').'' The second footnote, after the words ''1G Physical Port,'' states that ''1G physical ports are the default connection to the ITF, but Members may also connect to the ITF through a 10G physical port.''

IEX also proposes to make three conforming changes to the Connectivity Fees section of the IEX Fee Schedule. First, IEX proposes to renumber current footnote one to footnote three and current footnote two to footnote four, to reflect the addition of the new footnotes one and two. And IEX proposes to remove the words ''IEX Test Facility'' from the newly-renumbered footnote three, because the term is defined in the new footnote one.

2. Statutory Basis

IEX believes that the proposed rule change is consistent with the provisions of Section 6(b) [14] of the Act in general, and furthers the objectives of Sections 6(b)(4) [15] of the Act, in particular, in that it is designed to provide for the equitable allocation of reasonable dues, fees and other charges among its Members and other persons using its facilities. The Exchange also believes that the proposed rule change is consistent with Section 6(b)(5) [16] of the Act, in particular, in that it is designed to prevent fraudulent and manipulative acts and practices; to promote just and equitable principles of trade; to foster cooperation and coordination with persons engaged in facilitating transactions in securities; and to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest; and is not designed to permit unfair discrimination between customers, brokers, or dealers.

Specifically, the Exchange believes that the proposed rule change is consistent with Section 6(b)(4) of the Act because physical ports will continue to be available to all Members on the same basis and free of charge. As described in the Purpose section, all Members will continue to be able to connect to the IEX Production Systems through faster 10G physical ports, and may choose to use either 1G or 10G physical ports to connect to the ITF. As described in the Purpose section above, this proposed rule change does not change any fees charged by IEX, but rather provides clarity to market participants as to which physical port connections are available to connect to the Production Systems and the ITF.

The Exchange also believes that the proposed rule change is consistent with Section 6(b)(5) of the Act because it is designed to provide enhanced clarity to Members that 1G physical ports are only available to connect to the ITF, and that physical connections to the Exchange's Production Systems are only available through a 10G physical port connection. While the availability of 1G and 10G physical port connections are clearly described in the IEX Connectivity Manual, as discussed in the Purpose section, IEX believes that including descriptive language in the IEX Fee Schedule will provide enhanced clarity to Members.

Furthermore, the Exchange believes it is consistent with the Act to make conforming changes to the Connectivity Fees section of the Fee Schedule, because the renumbering of the footnotes and deletion of the duplicative language in the newly-numbered third footnote will provide enhanced clarity in the IEX Fee Schedule to the benefit of all market participants.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on intermarket or intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange believes that the proposed rule change does not impact competition in any respect, since it is merely designed to provide enhanced clarity to market participants rather than for any competitive purpose.

[8] *See* IEX Rule 1.160(s).

[9] Members physically connect to IEX through physical ports, each of which supports multiple ''logical port'' connections. Members send and receive data through the logical ports (also known as ''sessions'') such as order entry messages and market data feeds.

[10] *See* IEX Connectivity Manual (Version 1.80) at 5, available at *https://iextrading.com/docs/IEX%20Connectivity%20Manual.pdf.*

[11] Prior to January 1, 2017, IEX allowed Members to connect to the Production Systems through either 1G or 10G physical ports, *see* IEX Trading Alert #2016–060 ''Notice of Upcoming Network & Support Changes'' (October 28, 2016) available at *https://iextrading.com/trading/alerts/2016/060/,* but always recommended to Members that they connect via the faster 10G physical ports. *See* ''Connectivity Manual (Version 1.0),'' Addendum F–14 to IEX's Form 1 Filing (September 9, 2015).

[12] *See* supra note 10.

[13] *See* IEX Fee Schedule, available at *https://iextrading.com/trading/fees/.*

[14] 15 U.S.C. 78f.

[15] 15 U.S.C. 78f(b)(4).

[16] 15 U.S.C. 78f(b)(5).

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

The Exchange has filed the proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act [17] and Rule 19b–4(f)(6) thereunder.[18] Because the 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 prior to 30 days from the date on which it was filed, or such shorter time as the Commission may designate, if consistent with the protection of investors and the public interest, the proposed rule change has become effective pursuant to Section 19(b)(3)(A) of the Act [19] and Rule 19b–4(f)(6)(iii) thereunder.[20]

A proposed rule change filed under Rule 19b–4(f)(6) [21] normally does not become operative prior to 30 days after the date of the filing. However, pursuant to Rule 19b–4(f)(6)(iii),[22] the Commission may designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing because the proposed rule change merely clarifies the IEX Fee Schedule's description of physical port connections offered by IEX. The Exchange believes that waiver of the operative delay is consistent with the protection of investors and the public interest because it will allow the Exchange to provide clarity to market participants about which physical port connections may be used to connect to the Production Systems and the ITF, thereby permitting the Exchange to avoid any potential confusion on the part of its Members and their associated persons. For this reason, and because the proposal does not raise any novel issues or affect fees, the Commission believes that waiver of the 30-day operative delay is consistent with the protection of investors and the public interest. According, the Commission hereby waives the 30-day operative delay and designates the proposal operative upon filing.[23]

At any time within 60 days of the filing of this 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 will institute proceedings to determine whether the proposed rule change 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 (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–IEX–2020–06 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–IEX–2020–06. 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 (*http://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 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–IEX–2020–06, and should be submitted on or before June 2, 2020.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[24]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2020–10057 Filed 5–11–20; 8:45 am]

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[17] 15 U.S.C. 78s(b)(3)(A)(iii).

[18] 17 CFR 240.19b–4(f)(6).

[19] 15 U.S.C. 78s(b)(3)(A).

[20] 17 CFR 240.19b–4(f)(6). In addition, Rule 19b–4(f)(6)(iii) requires the Exchange to give the Commission written notice of the Exchange's 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.

[21] 17 CFR 240.19b–4(f)(6).

[22] 17 CFR 240.19b–4(f)(6)(iii).

[23] For purposed only of waiving the 30-day operative delay, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[24] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88822; File No. SR–NYSEArca–2020–37]

Self-Regulatory Organizations; NYSE Arca, Inc.; Notice of Filing of Proposed Rule Change, as Modified by Amendment No. 1, Regarding Investments of the PIMCO Enhanced Short Maturity Active ESG Exchange-Traded Fund

May 6, 2020.

Pursuant to Section 19(b)(1) [1] of the Securities Exchange Act of 1934 (the ''Act'') [2] and Rule 19b–4 thereunder,[3] notice is hereby given that, on April 29, 2020, NYSE Arca, Inc. (''NYSE Arca'' or the ''Exchange'') filed with the Securities and Exchange Commission (the ''Commission'') the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the self-regulatory organization. On May 4, 2020, the Exchange filed Amendment No. 1 to the proposed rule change, which superseded and replaced the proposed rule change in its entirety. The Commission is publishing this notice to solicit comments on the proposed rule

[1] 15 U.S.C. 78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

change, as modified by Amendment No. 1, from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes certain changes regarding investments of the PIMCO Enhanced Short Maturity Active ESG Exchange-Traded Fund (the ''Fund''), a series of PIMCO ETF Trust (the ''Trust''), shares of which are currently listed and traded on the Exchange under NYSE Arca Rule 8.600–E (''Managed Fund Shares'').[4] This Amendment No. 1 to SR–NYSEArca–2020–37 replaces SR–NYSEArca–2020–37 as originally filed and supersedes such filing in its entirety. The proposed change is available on the Exchange's website at *www.nyse.com,* at the principal office of the Exchange, 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 self-regulatory organization 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 those 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 parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes certain changes, described below under ''Application of Generic Listing Requirements,'' regarding investments of the Fund. The shares (''Shares'') of the Fund are currently listed and traded on the Exchange under Commentary .01 to NYSE Arca Rule 8.600–E, which provides generic criteria applicable to the listing and trading of Managed Fund Shares.[5]

Pacific Investment Management Company LLC is the investment adviser (''PIMCO'' or ''Adviser'') to the Fund. PIMCO Investments LLC is the distributor (''Distributor'') for the Fund's Shares. State Street Bank & Trust Co. acts as the custodian and transfer agent (''Custodian'' or ''Transfer Agent'') for the Fund. Shares are offered by PIMCO ETF Trust, which is registered with the Commission as an open-end management investment company.[6]

Commentary .06 to Rule 8.600–E provides that, if the investment adviser to the investment company issuing Managed Fund Shares is affiliated with a broker-dealer, such investment adviser shall erect and maintain a ''fire wall'' between the investment adviser and the broker-dealer with respect to access to information concerning the composition and/or changes to such investment company portfolio. In addition, Commentary .06 further requires that personnel who make decisions on the open-end fund's portfolio composition must be subject to procedures designed to prevent the use and dissemination of material nonpublic information regarding the open-end fund's portfolio. Commentary .06 to Rule 8.600–E is similar to Commentary .03(a)(i) and (iii) to NYSE Arca Rule 5.2–E(j)(3); however, Commentary .06 in connection with the establishment and maintenance of a ''fire wall'' between the investment adviser and the broker-dealer reflects the applicable open-end fund's portfolio, not an underlying benchmark index, as is the case with index-based funds.

The Adviser is not registered as a broker-dealer but is affiliated with a broker-dealer and has implemented and will maintain a fire wall with respect to such broker-dealer affiliate regarding access to information concerning the composition and/or changes to the portfolio. In the event (a) the Adviser becomes registered as a broker-dealer or newly affiliated with one or more broker-dealers, or (b) any new adviser or sub-adviser is a registered broker-dealer or becomes affiliated with a broker-dealer, it will implement and maintain a fire wall with respect to its relevant personnel or its broker-dealer affiliate regarding access to information concerning the composition and/or changes to the portfolio, and will be subject to procedures designed to prevent the use and dissemination of material non-public information regarding such portfolio.

PIMCO Enhanced Short Maturity Active ESG Exchange-Traded Fund

According to the Registration Statement, the investment objective of the Fund is to seek maximum current income, consistent with preservation of capital and daily liquidity, while incorporating PIMCO's environment, social responsibility, and governance (''ESG'') investment strategy. Under normal market conditions,[7] the Fund invests at least 80% of its net assets in a diversified portfolio of ''Fixed Income Instruments'' (defined below) of varying maturities, which may be represented by forwards.

In managing the Fund's portfolio, PIMCO may avoid investment in the securities of issuers whose business practices with respect to ESG practices are not to PIMCO's satisfaction.

Pursuant to this investment strategy, the Fund may invest in the following fixed income securities (together, ''Fixed Income Instruments''):

- securities issued or guaranteed by the U.S. government, its agencies, or U.S. government-sponsored entities (''U.S. government securities'');
- corporate debt securities of U.S. and non-U.S. issuers, including convertible securities and corporate commercial paper;
- mortgage-backed securities (''MBS'') and other asset-backed securities (''ABS''), including non-agency, non-government-sponsored entity (''GSE'') and privately-issued mortgage-related and other asset-backed securities (''Private ABS/MBS''), collateralized bond obligations (''CBOs''), collateralized loan obligations (''CLOs''), and other collateralized debt obligations (''CDOs'');[8]

[4] A Managed Fund Share is a security that represents an interest in an investment company registered under the Investment Company Act of 1940 (15 U.S.C. 80a–1) (''1940 Act'') organized as an open-end investment company or similar entity that invests in a portfolio of securities selected by its investment adviser consistent with its investment objectives and policies. In contrast, an open-end investment company that issues Investment Company Units, listed and traded on the Exchange under NYSE Arca Rule 5.2–E(j)(3), seeks to provide investment results that correspond generally to the price and yield performance of a specific foreign or domestic stock index, fixed income securities index or combination thereof.

[5] Shares commenced trading on the Exchange on December 10, 2019 pursuant to Commentary .01 to NYSE Arca Rule 8.600–E.

[6] The Trust is registered under the 1940 Act. On November 12, 2019, the Trust filed with the Commission its registration statement on Form N–1A under the Securities Act of 1933 (15 U.S.C. 77a), and under the 1940 Act relating to the Fund (File Nos. 333–155395 and 811–22250) (''Registration Statement''). The description of the operation of the Trust and the Fund herein is based, in part, on the Registration Statement. In addition, the Commission has issued an order upon which the Trust may rely, granting certain exemptive relief under the 1940 Act. See Investment Company Act Release No. 28993 (November 10, 2009) (File No. 812–13571).

[7] The term ''normal market conditions'' is defined in NYSE Arca Rule 8.600–E(c)(5).

[8] For avoidance of doubt, ''Private ABS/MBS'' as referenced herein are non-agency, non-GSE and privately-issued mortgage-related and other asset-backed securities as stated in Commentary .01(b)(5) to NYSE Arca Rule 8.600–E. However, for purposes of this filing, CDOs, CBOs, and CLOs are excluded from the term Private ABS/MBS. CDOs/CBOs/CLOs are distinguishable from ABS because they are collateralized by bank loans or by corporate or

• inflation-indexed bonds issued both by governments and corporations;
• structured notes, including hybrid or ''indexed'' securities and event-linked bonds;
• bank capital and trust preferred securities;
• loan participations and assignments;
• delayed funding loans and revolving credit facilities;
• bank certificates of deposit, fixed time deposits and bankers' acceptances;
• repurchase agreements on Fixed Income Instruments and reverse repurchase agreements on Fixed Income Instruments;
• debt securities issued by states or local governments and their agencies, authorities and other government-sponsored enterprises;
• obligations of non-U.S. governments or their subdivisions, agencies and government-sponsored enterprises; and
• obligations of international agencies or supranational entities.

With respect to Fixed Income Instruments, the Fund may invest, without limitation, in U.S. dollar-denominated securities of foreign issuers, U.S. dollar-denominated instruments of foreign issuers, and securities denominated in foreign currencies.

The Fund may invest in to-be-announced transactions. The Fund may also purchase and sell securities on a when-issued, delayed delivery or forward commitment basis.

The Fund may, without limitation, seek to obtain market exposure to the securities in which it primarily invests by entering into a series of purchase and sale contracts or by using other investment techniques (such as buy backs or dollar rolls).

The Fund may hold cash and cash equivalents.[9]

The Fund may invest in, to the extent permitted by Section 12(d) of the 1940 Act or exemptive relief therefrom, other affiliated and unaffiliated funds, such as open-end or closed-end management investment companies, including other exchange-traded funds (''ETFs'').[10]

Use of Derivatives by the Fund

The Fund may invest in forwards to (i) provide exposure to Fixed Income Instruments, (ii) enhance returns, (iii) manage portfolio duration, or (iv) manage the risk of securities price fluctuations. Investments in forwards will be made in accordance with the 1940 Act and consistent with the Fund's investment objective and policies.

To limit the potential risk associated with such transactions, the Fund may enter into offsetting transactions or segregate or ''earmark'' assets determined to be liquid by the Adviser in accordance with procedures established by the Trust's Board of Trustees (the ''Board'') and in accordance with the 1940 Act or as permitted by applicable Commission guidance. These procedures have been adopted consistent with Section 18 of the 1940 Act and related Commission guidance. In addition, the Fund has included risk disclosure in its offering documents, including leveraging risk. Leveraging risk is the risk that certain transactions of the Fund, including the Fund's use of forwards, may give rise to leverage, causing the Fund to be more volatile than if it had not been leveraged.

Impact on Arbitrage Mechanism

The Adviser believes there will be minimal, if any, impact to the arbitrage mechanism as a result of the Fund's use of forwards. The Adviser understands that market makers and participants should be able to value derivatives as long as the positions are disclosed with relevant information. The Adviser believes that the price at which Shares trade will continue to be disciplined by arbitrage opportunities created by the ability to purchase or redeem Shares at their net asset value (''NAV''), which should ensure that Shares will not trade at a material discount or premium in relation to their NAV.

Creation and Redemption of Shares

The Fund offers and issues Shares at the NAV per Share only in aggregations of a 50,000 Shares or multiples thereof (''Creation Units''), with certain large institutional investors who have entered into agreements with the Distributor (''Authorized Participants'') generally in exchange for a basket of securities (the ''Deposit Securities'') together with a deposit of a specified cash payment (the ''Cash Component''). Alternatively, the Fund may issue and redeem Creation Units in exchange for a specified all-cash payment (''Cash Deposit''). The size of a Creation Unit is subject to change. Shares are redeemable by the Fund only in Creation Units, and, generally, in exchange for securities and/or cash.

A ''Business Day'' with respect to the Fund is each day the Exchange is open. Orders from Authorized Participants to create or redeem Creation Units will only be accepted on a Business Day.

The consideration for purchase of Creation Units may consist of: (i) Deposit Securities and the Cash Component, which will generally correspond *pro rata,* to the extent practicable, to the Fund securities, or, alternatively; (ii) the Cash Deposit. Together, the Deposit Securities and Cash Component or, alternatively, the Cash Deposit, constitute the ''Fund Deposit,'' which represents the minimum initial and subsequent investment amount for a Creation Unit of the Fund.

PIMCO, through the National Securities Clearing Corporation (''NSCC''), makes available on each Business Day, prior to the opening of business (subject to amendments) on the Exchange (currently 9:30 a.m., Eastern time (''E.T.'')), the identity and the required number of each Deposit Security and the amount of the Cash Component (or Cash Deposit) to be included in the current Fund Deposit (based on information from the end of the previous Business Day).

The Deposit Securities and Cash Component (or Cash Deposit) are subject to any adjustments, as described below, in order to effect purchases of Creation Units of the Fund until such time as the next-announced composition of the Deposit Securities and Cash Component (or Cash Deposit) is made available.

The Trust may require the substitution of an amount of cash (a ''cash-in-lieu'' amount) to replace any Deposit Security of the Fund. The amount of cash contributed will be equivalent to the value of the instrument listed as a Deposit Security, as determined by the Trust. The Trust reserves the right to permit or require the substitution of a ''cash-in-lieu'' amount to be added to replace any Deposit Security that is a to-be announced (''TBA'') transaction, that may not be available in sufficient quantity for delivery, that may not be eligible for trading by a Participating Party (defined below), that may not be permitted to be registered in the name of the Trust as a result of an in-kind creation order pursuant to local law or market convention, or that may not be eligible for transfer through the systems of the Depository Trust Company (''DTC'') or the Clearing Process (as

government fixed income securities and not by consumer and other loans made by non-bank lenders, including student loans.

[9] For purposes of this filing, the term ''cash equivalents'' includes the short-term instruments enumerated in Commentary .01(c) to NYSE Arca Rule 8.600–E.

[10] For purposes of this filing, the term ''ETFs'' are Investment Company Units (as described in NYSE Arca Rule 5.2–E(j)(3)); Portfolio Depositary Receipts (as described in NYSE Arca Rule 8.100–E); and Managed Fund Shares (as described in NYSE Arca Rule 8.600–E). All ETFs will be listed and traded on national securities exchanges. While the Fund may invest in inverse ETFs, the Fund will not invest in leveraged (*e.g.,* 2X, -2X, 3X or -3X) ETFs.

discussed below), or the Federal Reserve System for U.S. Treasury securities. The Trust also reserves the right to permit or require a ''cash-in-lieu'' amount where the delivery of Deposit Securities by the Authorized Participant (as described below) would be restricted under the securities laws or where the delivery of Deposit Securities from an investor to the Authorized Participant would result in the disposition of Deposit Securities by the Authorized Participant becoming restricted under the securities laws, and in certain other situations. The Trust may permit a ''cash-in-lieu'' amount for any reason at the Trust's sole discretion but is not required to do so.

Redemption of Creation Units

Shares may be redeemed only in Creation Units at their NAV next determined after receipt of a redemption request in proper form on a Business Day and only through a Participating Party [11] or DTC Participant [12] who has executed a Participant Agreement. The Fund will not redeem shares in amounts less than Creation Units. Beneficial owners must accumulate enough shares to constitute a Creation Unit in order to have such shares redeemed by the Trust.

With respect to the Fund, as mentioned above, PIMCO, through the NSCC, makes available immediately prior to the opening of business on the Exchange (currently 9:30 a.m., E.T.) on each Business Day, the identity of the Fund's securities and/or an amount of cash that will be delivered in exchange for a redemption request received in proper form on that day. Fund securities received on redemption (''Fund Securities'') may not be identical to Deposit Securities that are used for the creation of Creation Units.

Unless cash-only redemptions are available or specified for the Fund, the redemption proceeds for a Creation Unit will generally consist of Fund Securities—as announced on the Business Day of the request for a redemption order received in proper form—plus cash in an amount equal to the difference between the NAV of the Shares being redeemed, as next determined after a receipt of a request in proper form, and the value of the Fund Securities (the ''Cash Redemption Amount''), less a redemption transaction fee, if applicable.

Application of Generic Listing Requirements

The Exchange is submitting this proposed rule change because the changes described below would result in the portfolio for the Fund not meeting all of the ''generic'' listing requirements of Commentary .01 to NYSE Arca Rule 8.600–E applicable to the listing of Managed Fund Shares. The Fund's portfolio would meet all such requirements except for those set forth in Commentary .01(b)(1), Commentary .01(b)(4) and Commentary .01(b)(5). Specifically, the Fund:

- Will not comply with the requirement in Commentary .01(b)(1) that components that in the aggregate account for at least 75% of the fixed income weight of the portfolio each shall have a minimum original principal amount outstanding of $100 million or more. Instead, the Exchange proposes that components, excluding Private ABS/MBS and CDOs/CBOs/CLOs that, in the aggregate, account for at least 50% of the fixed income weight of the portfolio each shall have a minimum original principal amount outstanding of $50 million or more. Private ABS/MBS and CDOs/CBOs/CLOs would not be subject to a requirement for a minimum original principal amount outstanding.

- will not comply with the requirement in Commentary .01(b)(5) to Rule 8.600–E that investments in non-agency, non-government sponsored entity and privately issued mortgage-related and other asset-backed securities (*i.e.,* Private ABS/MBS) not account, in the aggregate, for more than 20% of the weight of the portfolio.[13] Instead, the Fund will not invest more than 20% of the Fund's total assets in Private ABS/MBS or more than 20% of the Fund's total assets in U.S. or foreign CDOs/CBOs/CLOs.

- will not comply with the requirements in Commentary .01(b)(4) to Rule 8.600–E that component securities that in the aggregate account for at least 90% of the fixed income weight of the portfolio meet one of the criteria specified in Commentary .01(b)(4).[14] Instead, the Exchange proposes that (i) the Fund's investments in fixed income securities that do not meet any of the criteria in Commentary .01(b)(4) will not exceed 10% of the total assets of the Fund, excluding Private ABS/MBS and CDOs/CBOs/CLOs; (ii) Private ABS/MBS, which will be limited to 20% of the Fund's total assets, will not be required to comply with any of the criteria in Commentary .01(b)(4) to Rule 8.600–E; and (iii) CDOs/CBOs/CLOs also will not be subject to any of the criteria in Commentary .01(b)(4) but will be separately limited to 20% of the Fund's total assets.

Deviations from the generic requirements are necessary for the Fund to achieve its investment objective in a manner that is cost-effective and that maximizes investors' returns. Further, the proposed alternative requirements are narrowly tailored to allow the Fund to achieve its investment objective in manner that is consistent with the principles of Section 6(b)(5) of the Act. As a result, it is in the public interest to approve listing and trading of Shares of the Fund on the Exchange pursuant to the requirements set forth herein.

As noted above, the Fund will not comply with the requirement in Commentary .01(b)(1) to Rule 8.600–E that components that in the aggregate account for at least 75% of the fixed income weight of the portfolio each shall have a minimum original principal amount outstanding of $100 million or more. Instead, the Exchange proposes that components, excluding Private ABS/MBS and CDOs/CBOs/CLOs, that in the aggregate account for at least 50% of the fixed income weight of the portfolio each shall have a minimum original principal amount outstanding of $50 million or more. Private ABS/MBS and CDOs/CBOs/CLOs will not be subject to a requirement for a minimum original principal amount outstanding. At least 50% of the fixed income weight of the Fund's portfolio, excluding Private ABS/MBS and CDOs/CBOs/CLOs, will continue to be subject to a substantial minimum (*i.e.,* $50 million)

[11] A ''Participating Party'' is a broker-dealer or other participant in the clearing process through the Continuous Net Settlement System of the NSCC (the ''Clearing Process''), a clearing agency that is registered with the SEC; or (ii) a DTC Participant, and must have executed an agreement with the Distributor (and accepted by the Transfer Agent), with respect to creations and redemptions of Creation Units (''Participant Agreement'').

[12] DTC participants include securities brokers and dealers, banks, trust companies, clearing corporations and other institutions that directly or indirectly maintain a custodial relationship with Depository Trust Company.

[13] Commentary .01(b)(5) to NYSE Arca Rule 8.600–E provides that non-agency, non-government sponsored entity and privately issued mortgage-related and other asset-backed securities components of a portfolio may not account, in the aggregate, for more than 20% of the weight of the portfolio.

[14] Commentary .01(b)(4) provides that component securities that in the aggregate account for at least 90% of the fixed income weight of the portfolio must be either: (a) From issuers that are required to file reports pursuant to Sections 13 and 15(d) of the Act; (b) from issuers that have a worldwide market value of its outstanding common equity held by non-affiliates of $700 million or more; (c) from issuers that have outstanding securities that are notes, bonds debentures, or evidence of indebtedness having a total remaining principal amount of at least $1 billion; (d) exempted securities as defined in Section 3(a)(12) of the Act; or (e) from issuers that are a government of a foreign country or a political subdivision of a foreign country.

original principal amount outstanding.[15] By excluding Private ABS/MBS and CDOs/CBOs/CLOs from this requirement, the Fund will be able to better diversify its holdings in such securities, and will be able to invest in a larger variety of Private ABS/MBS and CDOs/CBOs/CLOs that have characteristics consistent with the Fund's investment objective to seek maximum current income, consistent with preservation of capital and daily liquidity, while incorporating PIMCO's ESG investment strategy. These characteristics may include, for example, Private ABS/MBS and CDOs/CBOs/CLOs with investment grade credit rating or liquidity comparable to fixed income securities with a much greater amount outstanding. The Adviser represents that, with respect to the Fund's investments in CDOs/CBOs/CLOs, the Fund will invest principally in the senior-most tranches of these securities, generally with an AAA investment rating which have first claim in the capital structure and generally have less sensitivity to the credit risk of the underlying assets (*e.g.,* bank loans or commercial real estate).

The Fund will not comply with the requirement in Commentary .01(b)(5) to Rule 8.600–E that investments in non-agency, non-government sponsored entity and privately issued mortgage-related and other asset-backed securities (*i.e.,* Private ABS/MBS) not account, in the aggregate, for more than 20% of the weight of the portfolio. Instead, the Fund will not invest more than 20% of the Fund's total assets in Private ABS/MBS or more than 20% of the Fund's total assets in U.S. or foreign CDOs/CBOs/CLOs.[16] The Exchange believes that these 20% limitations will help the Fund maintain portfolio diversification and will reduce manipulation risk. In addition, the Fund's investment in CDOs/CBOs/CLOs will be subject to the Fund's liquidity procedures as adopted by the Board, and the Adviser does not expect that investments in CDOs/CBOs/CLOs of up to 20% of the total assets of the Fund will have any material impact on the liquidity of the Fund's investments.

The Fund will not comply with the requirements in Commentary .01(b)(4) to Rule 8.600–E that component securities that in the aggregate account for at least 90% of the fixed income weight of the portfolio meet one of the criteria specified in Commentary .01(b)(4). Instead, the Exchange proposes that: (i) The Fund's investments in fixed income securities that do not meet any of the criteria in Commentary .01(b)(4) will not exceed 10% of the total assets of the Fund, excluding Private ABS/MBS and CDOs/CBOs/CLOs; (ii) Private ABS/MBS, which will be limited to 20% of the Fund's total assets, will not be required to comply with the criteria in Commentary .01(b)(4)(a) through (e) to Rule 8.600–E; and (iii) CDOs/CBOs/CLOs also will not be subject to the criteria in Commentary .01(b)(4)(a) through (e) but will be subject to a limit of 20%, measured with respect to the total assets of the Fund. [17]

The Exchange accordingly believes that it is appropriate and in the public interest to approve listing and trading of Shares of the Fund on the Exchange notwithstanding that the Fund would not meet the requirements of Commentary .01(b)(1), (b)(4) and (b)(5) to Rule 8.600–E. The Exchange notes that, other than Commentary .01(b)(1), Commentary .01 (b)(4) and Commentary .01(b)(5) to Rule 8.600–E, the Fund's portfolio will meet all other requirements of Rule 8.600.

Availability of Information

The Fund's website (*www.pimco.com*) will include the prospectus for the Fund that may be downloaded. The Fund's website will include additional quantitative information updated on a daily basis including, for the Fund, (1) daily trading volume, the prior Business Day's reported closing price, NAV and midpoint of the bid/ask spread at the time of calculation of such NAV (the ''Bid/Ask Price''),[18] and a calculation of the premium and discount of the Bid/Ask Price against the NAV, and (2) data in chart format displaying the frequency distribution of discounts and premiums of the daily Bid/Ask Price against the NAV, within appropriate ranges, for each of the four previous calendar quarters. On each Business Day, before commencement of trading in Shares in the Core Trading Session on the Exchange, the Fund will disclose on its website the Disclosed Portfolio as defined in NYSE Arca Rule 8.600–E(c)(2) that forms the basis for the Fund's calculation of NAV at the end of the Business Day.[19]

On a daily basis, the Fund will disclose the information required under NYSE Arca Rule 8.600–E(c)(2) to the extent applicable. The website information will be publicly available at no charge.

In addition, a basket composition file, which includes the security names and share quantities, if applicable, required to be delivered in exchange for the Fund's Shares, together with estimates and actual cash components, will be publicly disseminated daily prior to the opening of the Exchange via the NSCC. The basket represents one Creation Unit of the Fund. Authorized Participants may refer to the basket composition file for information regarding fixed income securities, and any other instrument that may comprise the Fund's basket on a given day.

Investors can also obtain the Trust's Statement of Additional Information (''SAI''), the Fund's Shareholder Reports, and the Fund's Forms N–CSR and Forms N–CEN, filed twice a year. The Fund's SAI and Shareholder Reports will be available free upon request from the Trust, and those documents and the Form N–CSR, Form N–PX and Form N–CEN may be viewed on-screen or downloaded from the Commission's website at *www.sec.gov.*

Intra-day and closing price information regarding fixed income securities will be available from major market data vendors. For ETFs, intraday price quotations will generally be available from broker-dealers and trading platforms (as applicable). Intraday and other price information for the fixed income securities in which the Fund will invest will be available through subscription services, such as

[15] The Exchange notes that the Commission has previously approved a proposed rule change granting the same proposals in regard to Commentary .01(b)(1) to Rule 8.600–E. *See* Securities Exchange Act Release No. 86841 (August 30, 2019), 84 FR 47024 (September 6, 2019) (SR–NYSEArca–2019–38) (Order Approving a Proposed Rule Change, as Modified by Amendments No. 1 and No. 2, To Amend the Listing Rule Applicable to Shares of the Aware Ultra-Short Duration Enhanced Income ETF).

[16] The Exchange notes that the Commission has previously approved a proposed rule change granting the same proposals in regard to Commentary .01(b)(5) to Rule 8.600–E. *See* Securities Exchange Act Release No. 87576 (November 20, 2019), 84 FR 65206 (November 26, 2019) (SR–NYSEArca–2019–14) (Order Approving a Proposed Rule Change, as Modified by Amendment No. 1, Relating to the Permitted Investments of the PGIM Ultra Short Bond ETF).

[17] The Exchange notes that the Commission has previously approved a proposed rule change granting the same proposals in regard to Commentary .01(b)(4) to Rule 8.600–E. *See* Securities Exchange Act Release No. 87576 (November 20, 2019), 84 FR 65206 (November 26, 2019) (SR–NYSEArca–2019–14) (Order Approving a Proposed Rule Change, as Modified by Amendment No. 1, Relating to the Permitted Investments of the PGIM Ultra Short Bond ETF).

[18] The Bid/Ask Price of the Fund's Shares will be determined using the mid-point of the highest bid and the lowest offer on the Exchange as of the time of calculation of the Fund's NAV. The records relating to Bid/Ask Prices will be retained by the Fund and its service providers.

[19] Under accounting procedures followed by the Fund, trades made on the prior Business Day (''T'') will be booked and reflected in NAV on the current Business Day (''T + 1''). Accordingly, the Fund will be able to disclose at the beginning of the Business Day the portfolio that will form the basis for the NAV calculation at the end of the Business Day.

Bloomberg, Markit and Thomson Reuters, which can be accessed by Authorized Participants and other market participants. Price information for forwards and for affiliated and unaffiliated funds, such as open-end or closed-end management investment companies, is available from major market data vendors. Additionally, the Trade Reporting and Compliance Engine (''TRACE'') of the Financial Industry Regulatory Authority (''FINRA'') will be a source of price information for corporate bonds, and Private ABS/MBS, to the extent transactions in such securities are reported to TRACE.[20] Money market funds are typically priced once each Business Day and their prices will be available through the applicable fund's website or from major market data vendors. Electronic Municipal Market Access (''EMMA'') will be a source of price information for municipal bonds. Price information regarding U.S. government securities, repurchase agreements, reverse repurchase agreements and cash equivalents generally may be obtained from brokers and dealers who make markets in such securities or through nationally recognized pricing services through subscription agreements.

Information regarding market price and trading volume of the Shares will be continually available on a real-time basis throughout the day on brokers' computer screens and other electronic services. Information regarding the previous day's closing price and trading volume information for the Shares will be published daily in the financial section of newspapers.

Quotation and last sale information for the Shares will be available via the Consolidated Tape Association (''CTA'') high-speed line. In addition, the Portfolio Indicative Value (''PIV''), as defined in NYSE Arca Rule 8.600–E(c)(3), will be widely disseminated by one or more major market data vendors at least every 15 seconds during the Core Trading Session.

Trading Halts

With respect to trading halts, the Exchange may consider all relevant factors in exercising its discretion to halt or suspend trading in the Shares of the Fund. Trading in Shares of the Fund will be halted if the circuit breaker parameters in NYSE Arca Rule 7.12–E have been reached. Trading also may be halted because of market conditions or for reasons that, in the view of the Exchange, make trading in the Shares inadvisable. Trading in the Fund's Shares also will be subject to Rule 8.600–E(d)(2)(D) (''Trading Halts'').

Trading Rules

The Exchange deems the Shares to be equity securities, thus rendering trading in the Shares subject to the Exchange's existing rules governing the trading of equity securities. Shares will trade on the NYSE Arca Marketplace from 4:00 a.m. to 8:00 p.m. E.T. in accordance with NYSE Arca Rule 7.34–E (Trading Sessions). The Exchange has appropriate rules to facilitate transactions in the Shares during all trading sessions. As provided in NYSE Arca Rule 7.6–E, the minimum price variation (''MPV'') for quoting and entry of orders in equity securities traded on the NYSE Arca Marketplace is $0.01, with the exception of securities that are priced less than $1.00 for which the MPV for order entry is $0.0001.

With the exception of the requirements of Commentary .01(b)(1), (b)(4) and (b)(5) to Rule 8.600–E as described above in ''Application of Generic Listing Requirements,'' the Shares of the Fund will conform to the continued listing criteria under NYSE Arca Rule 8.600–E. Consistent with NYSE Arca Rule 8.600–E(d)(2)(B)(ii), the Adviser will implement and maintain, or be subject to, procedures designed to prevent the use and dissemination of material non-public information regarding the actual components of the Fund's portfolio.

The Exchange has obtained a representation from the issuer of the Shares that the NAV per Share will be calculated daily and that the NAV and the Disclosed Portfolio will be made available to all market participants at the same time. The Fund's investments will be consistent with its investment goal and will not be used to enhance leverage.

Surveillance

The Exchange represents that trading in the Shares will be subject to the existing trading surveillances, administered by FINRA on behalf of the Exchange, or by regulatory staff of the Exchange, which are designed to detect violations of Exchange rules and applicable federal securities laws. The Exchange represents that these procedures are adequate to properly monitor Exchange trading of the Shares in all trading sessions and to deter and detect violations of Exchange rules and federal securities laws applicable to trading on the Exchange.[21]

The surveillances referred to above generally focus on detecting securities trading outside their normal patterns, which could be indicative of manipulative or other violative activity. When such situations are detected, surveillance analysis follows and investigations are opened, where appropriate, to review the behavior of all relevant parties for all relevant trading violations.

The Exchange or FINRA, on behalf of the Exchange, or both, will communicate as needed regarding trading in the Shares and ETFs with other markets and other entities that are members of the Intermarket Surveillance Group (''ISG''), and the Exchange or FINRA, on behalf of the Exchange, or both, may obtain trading information regarding trading in such securities from such markets and other entities.[22] In addition, FINRA, on behalf of the Exchange, is able to access, as needed, trade information for certain fixed income securities held by the Fund reported to TRACE. FINRA also can access data obtained from the Municipal Securities Rulemaking Board (''MSRB'') relating to certain municipal bond trading activity for surveillance purposes in connection with trading in the Shares.

In addition, the Exchange also has a general policy prohibiting the distribution of material, non-public information by its employees.

All statements and representations made in this filing regarding (a) the description of the portfolio or reference asset, (b) limitations on portfolio holdings or reference assets, or (c) the applicability of Exchange listing rules specified in this rule filing shall constitute continued listing requirements for listing the Shares of the Fund on the Exchange.

The issuer must notify the Exchange of any failure by the Fund to comply with the continued listing requirements, and, pursuant to its obligations under Section 19(g)(1) of the Act, the Exchange will monitor for compliance with the continued listing requirements. If the

[20] Broker-dealers that are FINRA member firms have an obligation to report transactions in specified debt securities to TRACE to the extent required under applicable FINRA rules. Generally, such debt securities will have at issuance a maturity that exceeds one calendar year. For fixed income securities that are not reported to TRACE, (i) intraday price quotations will generally be available from broker-dealers and trading platforms (as applicable) and (ii) price information will be available from feeds from market data vendors, published or other public sources, or online information services, as described above.

[21] FINRA conducts cross-market surveillances on behalf of the Exchange pursuant to a regulatory services agreement. The Exchange is responsible for FINRA's performance under this regulatory services agreement.

[22] For a list of the current members of ISG, see *www.isgportal.org.* The Exchange notes that not all components of the Disclosed Portfolio may trade on markets that are members of ISG or with which the Exchange has in place a comprehensive surveillance sharing agreement (''CSSA'').

Fund is not in compliance with the applicable listing requirements, the Exchange will commence delisting procedures under NYSE Arca Rule 5.5–E (m).

Information Bulletin

The Exchange will inform its Equity Trading Permit Holders in an Information Bulletin (''Bulletin'') of the special characteristics and risks associated with trading the Shares. Specifically, the Bulletin will discuss the following: (1) The procedures for purchases and redemptions of Shares in Creation Unit aggregations (and that Shares are not individually redeemable); (2) NYSE Arca Rule 9.2–E(a), which imposes a duty of due diligence on its Equity Trading Permit Holders to learn the essential facts relating to every customer prior to trading the Shares; (3) the risks involved in trading the Shares during the applicable Trading Sessions when an updated PIV will not be calculated or publicly disseminated; (4) how information regarding the PIV and the Disclosed Portfolio is disseminated; (5) the requirement that Equity Trading Permit Holders deliver a prospectus to investors purchasing newly issued Shares prior to or concurrently with the confirmation of a transaction; and (6) trading information.

In addition, the Bulletin will reference that the Fund is subject to various fees and expenses described in the Registration Statement. The Bulletin will discuss any exemptive, no-action, and interpretive relief granted by the Commission from any rules under the Act. The Bulletin will also disclose that the NAV for the Shares will be calculated after 4:00 p.m., E.T. each trading day.

2. Statutory Basis

The basis under the Act for this proposed rule change is the requirement under Section 6(b)(5) of the Act that an exchange have rules that are designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to, and perfect the mechanism of a free and open market and, in general, to protect investors and the public interest.

The Exchange believes that the proposed rule change is designed to prevent fraudulent and manipulative acts and practices in that the Shares are listed and traded on the Exchange pursuant to the initial and continued listing criteria in NYSE Arca Rule 8.600–E. The Exchange has in place surveillance procedures that are adequate to properly monitor trading in the Shares in all trading sessions and to deter and detect violations of Exchange rules and federal securities laws applicable to trading on the Exchange. The Adviser is not registered as a broker-dealer, but the Adviser is affiliated with a broker-dealer and has implemented and will maintain a ''fire wall'' with respect to such broker-dealer regarding access to information concerning the composition and/or changes to the Fund's portfolio. The Exchange or FINRA, on behalf of the Exchange, or both, will communicate as needed regarding trading in the Shares and ETFs with other markets and other entities that are members of the ISG, and the Exchange or FINRA, on behalf of the Exchange, or both, may obtain trading information regarding trading in such securities from such markets and other entities. In addition, FINRA, on behalf of the Exchange, is able to access, as needed, trade information for certain fixed income securities held by the Fund reported to TRACE. FINRA also can access data obtained from the MSRB relating to certain municipal bond trading activity for surveillance purposes in connection with trading in the Shares.

The proposed rule change is designed to promote just and equitable principles of trade and to protect investors and the public interest in that the Exchange will obtain a representation from the issuer of the Shares that the NAV per Share will be calculated daily and that the NAV and the Disclosed Portfolio will be made available to all market participants at the same time. In addition, a large amount of information is publicly available regarding the Fund and the Shares, thereby promoting market transparency. The website for the Fund includes a form of the prospectus for the Fund and additional data relating to NAV and other applicable quantitative information. Trading in Shares of the Fund will be halted if the circuit breaker parameters in NYSE Arca Rule 7.12–E have been reached or because of market conditions or for reasons that, in the view of the Exchange, make trading in the Shares inadvisable, and trading in the Shares will be subject to NYSE Arca Rule 8.600–E (d)(2)(D), which sets forth circumstances under which trading in the Shares of the Fund may be halted. In addition, as noted above, investors will have ready access to information regarding the Fund's holdings, NAV, the PIV, the Disclosed Portfolio, and quotation and last sale information for the Shares.

As described above, deviations from the generic requirements are necessary for the Fund to achieve its investment objective in a manner that is cost-effective and that maximizes investors' returns. Further, the proposed alternative requirements are narrowly tailored to allow the Fund to achieve its investment objective in manner that is consistent with the principles of Section 6(b)(5) of the Act. As a result, it is in the public interest to approve listing and trading of Shares of the Fund on the Exchange pursuant to the requirements set forth herein.[23]

As discussed above, the Fund will not comply with the requirement in Commentary .01(b)(1) to Rule 8.600–E that components that in the aggregate account for at least 75% of the fixed income weight of the portfolio each have a minimum original principal amount outstanding of $100 million or more. Instead, the Exchange proposes that components, excluding Private ABS/MBS and CDOs/CBOs/CLOs, that in the aggregate account for at least 50% of the fixed income weight of the portfolio each shall have a minimum original principal amount outstanding of $50 million or more. Private ABS/MBS and CDOs/CBOs/CLOs would not be subject to a requirement for a minimum original principal amount outstanding. The Exchange believes this alternative is appropriate because at least 50% of the fixed income weight of the Fund's portfolio, excluding Private ABS/MBS and CDOs/CBOs/CLOs, would continue to be subject to a substantial minimum (*i.e.,* $50 million) original principal amount outstanding. In addition, by excluding Private ABS/MBS and CDOs/CBOs/CLOs from this requirement, the Fund will be able to better diversify its holdings in such securities, and would be able to invest in a larger variety of Private ABS/MBS and CDOs/CBOs/CLOs that have characteristics consistent with the Fund's investment objective to seek maximum current income, consistent with preservation of capital and daily liquidity, while incorporating PIMCO's ESG investment strategy.

The Fund will not comply with the requirement in Commentary .01(b)(5) to Rule 8.600–E that investments in non-agency, non-government sponsored entity and privately issued mortgage-related and other asset-backed securities (*i.e.,* Private ABS/MBS) not account, in the aggregate, for more than 20% of the weight of the portfolio. Instead, the Fund will not invest more than 20% of the Fund's total assets in Private ABS/MBS or more than 20% of the Fund's total assets in U.S. or foreign CDOs/

[23] The Exchange represents that, for continued listing, the Fund will be in compliance with Rule 10A–3 under the Act, as provided by NYSE Arca Rule 5.3–E.

CBOs/CLOs.[24] The Exchange believes that these 20% limitations will help the Fund maintain portfolio diversification and will reduce manipulation risk. In addition, the Fund's investment in CDOs/CBOs/CLOs will be subject to the Fund's liquidity procedures as adopted by the Board, and the Adviser does not expect that investments in CDOs/CBOs/CLOs of up to 20% of the total assets of the Fund will have any material impact on the liquidity of the Fund's investments.

The Fund will not comply with the requirements in Commentary .01(b)(4) to Rule 8.600–E that component securities that in the aggregate account for at least 90% of the fixed income weight of the portfolio meet one of the criteria specified in Commentary .01(b)(4). Instead, the Exchange proposes that: (i) The Fund's investments in fixed income securities that do not meet any of the criteria in Commentary .01(b)(4) will not exceed 10% of the total assets of the Fund, excluding Private ABS/MBS and CDOs/CBOs/CLOs; (ii) Private ABS/MBS, which will be limited to 20% of the Fund's total assets, will not be required to comply with any of the criteria in Commentary .01(b)(4); and (iii) CDOs/CBOs/CLOs also will not be subject to any of the criteria in Commentary .01(b)(4) but will be separately limited to 20% of the Fund's total assets.

The Adviser represents that, with respect to the Fund's investments in CDOs/CBOs/CLOs, the Fund will invest principally in the senior-most tranches of these securities, generally with an AAA investment rating which have first claim in the capital structure and generally have less sensitivity to the credit risk of the underlying assets (*e.g.,* bank loans or commercial real estate).

The proposed rule change is designed to perfect the mechanism of a free and open market and, in general, to protect investors and the public interest in that it will facilitate the listing and trading of an additional type of actively managed ETF that will enhance competition among market participants, to the benefit of investors and the marketplace. As noted above, the Exchange has in place surveillance procedures relating to trading in the Shares and may obtain information via ISG from other exchanges that are members of ISG or with which the Exchange has entered into a CSSA. In addition, as noted above, investors have ready access to information regarding the Fund's holdings, NAV, the PIV, the Disclosed Portfolio, and quotation and last sale information for the Shares.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purpose of the Act. The Exchange notes that the proposed rule change will facilitate a change to the Fund's investments similar to investments of other actively managed ETFs, shares of which have been approved for Exchange listing and trading,[25] that principally hold fixed income securities, and that will enhance competition among market participants, to the benefit of investors and the marketplace.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the **Federal Register** or up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) by order approve or disapprove the proposed rule change, or

(B) institute proceedings to determine whether the proposed rule change should be 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, as modified by Amendment No. 1, is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–NYSEArca–2020–37 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–NYSEArca–2020–37. 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 (*http://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 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSEArca–2020–37 and should be submitted on or before June 2, 2020.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[26]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2020–10060 Filed 5–11–20; 8:45 am]

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[24] The Exchange notes that the Commission has previously approved a proposed rule change granting the same proposals in regard to Commentary .01(b)(5) to Rule 8.600–E. *See* Securities Exchange Act Release No. 87576 (November 20, 2019), 84 FR 65206 (November 26, 2019) (SR–NYSEArca–2019–14) (Order Approving a Proposed Rule Change, as Modified by Amendment No. 1, Relating to the Permitted Investments of the PGIM Ultra Short Bond ETF).

[25] *See* notes 13–15, *supra.*

[26] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88826; File No. S7–24–89]

Joint Industry Plan; Order Approving the Forty-Seventh Amendment to the Joint Self-Regulatory Organization Plan Governing the Collection, Consolidation and Dissemination of Quotation and Transaction Information for Nasdaq-Listed Securities Traded on Exchanges on an Unlisted Trading Privileges, as Modified by the Commission, Concerning a Confidentiality Policy

May 6, 2020.

I. Introduction

On November 25, 2019,[1] the Joint Self-Regulatory Organization Plan Governing the Collection, Consolidation and Dissemination of Quotation and Transaction Information for Nasdaq-Listed Securities Traded on Exchanges on an Unlisted Trading Privileges Basis (''Nasdaq/UTP Plan'' or ''Plan'') participants (''Participants'')[2] filed with the Securities and Exchange Commission (''SEC'' or ''Commission'') pursuant to Section 11A of the Securities Exchange Act of 1934 (''Act'')[3] and Rule 608 of Regulation National Market System (''NMS'') thereunder,[4] a proposal to amend the Nasdaq/UTP Plan.[5] The amendment represents the Forty-Seventh Amendment to the Plan (''Amendment''). As described in the Amendment, the Participants proposed to adopt a confidentiality policy to provide guidelines for the Operating Committee and the Advisory Committee of the Plan, and all subcommittees thereof, regarding the confidentiality of any data or information generated, accessed, or transmitted to the Operating Committee, as well as discussions occurring at a meeting of the Operating Committee or any subcommittee. The Amendment was published for comment in the **Federal Register** on January 14, 2020.[6]

In the Commission's view, the Amendment must balance protection against the potential misuse of confidential information with the strong interest in public transparency about the operations of the Plan in light of the important function the Plan serves in the national market system. This order approves the Amendment to the Plan, as modified by the Commission, to better strike that balance. A copy of the Amendment, as modified by the Commission, is attached as *Exhibit A* hereto. The Commission concludes that the Amendment, as modified, is appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanism of a national market system, or is otherwise in furtherance of the purposes of the Act.[7]

II. Description of the Proposal

According to the Participants, the confidentiality policy is designed broadly to (i) protect against any potential misuse of confidential information, which includes, but is not limited to, protecting confidential information obtained or generated by the Administrator and Processor in connection with the operation of the securities information processor (''SIP'') operated pursuant to the Plan; as well as (ii) to allow the Operating Committee to disclose confidential information to the Advisory Committee to obtain its input without concern that such confidential information may be shared beyond the Advisory Committee.[8]

Among other things, the Participants believe that the proposed Amendment will allow for more sharing of information with the Advisory Committee regarding the operation of the Plan and elicit more input by the Advisory Committee on Plan matters that might otherwise be deemed confidential.[9] By sharing information that would in the ordinary course be considered appropriate for confidential treatment, the Participants believe that the Advisory Committee will be able to provide more informed advice and recommendations with respect to the operation and governance of the Plan.[10]

A. Proposed Confidentiality Policy

The confidentiality policy proposed by the Participants applies to all representatives of the Participants, Pending Participants, the Nasdaq/UTP Administrator and Processor, and the Advisory Committee. Additionally, it applies to agents of the Operating Committee, including, but not limited to, attorneys, advisors, accountants, contractors or subcontractors, as well as any third parties invited to attend meetings of the Operating Committee or Plan subcommittees. These persons are collectively defined in the confidentiality policy as ''Covered Persons.''[11]

The policy establishes guidelines and procedures for (i) identifying and categorizing types of confidential information, (ii) providing increasing degrees of protection for more sensitive types of confidential information, and (iii) setting forth the circumstances in which disclosure of confidential information may be authorized. The proposed confidentiality policy creates three categories of confidential information: (1) Restricted Information;[12] (2) Highly Confidential Information;[13] and (3) Confidential

[1] *See* Letter from Robert Books, Chairman, Operating Committee, Nasdaq/UTP Plan, to Vanessa Countryman, Secretary, Commission, dated November 19, 2019 (''Transmittal Letter'').

[2] The Participants are the national securities association and national securities exchanges that submit trades and quotes to the Plan and include: Cboe BYX Exchange, Inc., Cboe BZX Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe EDGX Exchange, Inc., Cboe Exchange, Inc., Financial Industry Regulatory Authority, Inc., The Investors Exchange LLC, Long-Term Stock Exchange, Inc., Nasdaq BX, Inc., Nasdaq ISE, LLC, Nasdaq PHLX, Inc., The Nasdaq Stock Market LLC, New York Stock Exchange LLC, NYSE American LLC, NYSE Arca, Inc., NYSE Chicago, Inc., and NYSE National, Inc. (each a ''Participant'' and collectively, the ''Participants''). Participants also are members of the Plan's Operating Committees. Other parties include the ''Processor,'' who is charged with collecting, processing and preparing for distribution or publication all Plan information. The ''Administrator'' is charged with administering the Plan to include data feed approval, customer communications, contract management, and related functions. The ''Advisory Committee members'' are individuals who represent particular types of financial services firms or actors in the securities market, and who were selected by Plan participants to be on the Advisory Committee. A list of the Processor, Administrator, and Advisory Committee members is available at *http://www.utpplan.com/governance.*

[3] 15 U.S.C. 78k–1(a)(3).

[4] 17 CFR 242.608.

[5] The Plan governs the collection, processing, and dissemination on a consolidated basis of quotation information and transaction reports in Eligible Securities for its Participants. This consolidated information informs investors of the current quotation and recent trade prices of Nasdaq securities. It enables investors to ascertain from one data source the current prices in all the markets trading Nasdaq securities. The Plan serves as the required transaction reporting plan for its Participants, which is a prerequisite for their trading Eligible Securities. *See* Securities Exchange Act Release No. 55647 (April 19, 2007), 72 FR 20891 (April 26, 2007).

[6] *See* Securities Exchange Act Release No. 87910 (January 8, 2020), 85 FR 2212 (January 14, 2020) (''Notice''). Comments received in response to the Notice are available at *https://www.sec.gov/comments/s7-24-89/s72489.shtml.*

[7] 17 CFR 242.608(b)(2).

[8] *See* Notice, *supra* note 6, 85 FR at 2207. The Amendment also proposes to define the term ''Public Information'' and require that certain information be made publicly available. *See* Section 2(d) of the proposed policy.

[9] *See* Notice, *supra* note 6, 85 FR at 2213.

[10] *See id.* at 2214.

[11] As specifically set forth by the Participants under Section 1(b) of the proposed policy, Covered Persons would not include staff of the Commission.

[12] Restricted Information was defined by the Participants under Section 2(a) of the proposed policy as (i) highly sensitive customer-specific financial information, (ii) customer-specific audit information, (iii) other customer financial information, and (iv) ''Personal Identifiable Information.''

[13] Highly Confidential Information was defined by the Participants under Section 2(b) of the

Continued

Information.[14] The proposed confidentiality policy also defines the term ''Public Information.'' [15] The confidentiality policy outlines the procedures with respect to identifying documents as Restricted, Highly Confidential, or Confidential as well as the procedures regarding how to treat documents and information in each category. The confidentiality policy places the obligation on the Administrator and the Processor to be the custodians of all documents discussed by the Operating Committee and to maintain the classification of such documents.[16]

B. Procedures Governing Restricted Information

With respect to Restricted Information, to ensure the protection of customer identities and customer-related information, the proposed Amendment provides that such information will be disclosed only when necessary to conduct Plan-related business.[17] Specifically, Restricted Information will be kept in confidence by the Administrator and Processor and will not be disclosed to the Operating Committee or any subcommittee thereof, or during Executive Session,[18] or to the Advisory Committee except in limited circumstances.

C. Procedures Governing Highly Confidential Information

With respect to Highly Confidential Information, the proposed confidentiality policy provides that such information may be disclosed only in Executive Session of the Operating Committee or to the Legal Subcommittee. Highly Confidential Information also may be disclosed to SEC staff, unless it is protected by the Attorney-Client Privilege or the Work Product Doctrine.

In addition, the proposal allows a Covered Person that is a representative of a Participant to disclose Highly Confidential Information to other employees or agents of the Participant or to the Participant's affiliates as needed for such Covered Person to perform his or her function on behalf of the Participant, as reasonably determined by the Covered Person.[19]

Further, because of the heightened concerns regarding the disclosure of Highly Confidential Information, in the event a Covered Person is determined by a majority vote of the Operating Committee to have disclosed Highly Confidential Information, the proposal authorizes the Operating Committee to determine the appropriate remedy for the breach based on the facts and circumstances of the event.[20]

D. Procedures Governing Confidential Information

Under the proposed confidentiality policy, Confidential Information may be disclosed to the Operating Committee, any subcommittee thereof, and the Advisory Committee. A Covered Person may not disclose Confidential Information to any individual that is not either a Covered Person or a member of the SEC staff, except with authorization of the Operating Committee, or as may be otherwise required by law.[21]

Further, in order to elicit industry feedback, members of the Advisory Committee may be authorized by the Operating Committee to disclose particular Confidential Information to enable them to consult with third-party industry representatives or technical experts subject to certain restrictions.

As it does for Highly Confidential Information, the proposal allows a Covered Person that is a representative of a Participant to disclose Confidential Information to other employees or agents of the Participant or to the Participant's affiliates as needed for such Covered Person to perform his or her function on behalf of the Participant, as reasonably determined by the Covered Person.[22]

Finally, the proposal requires a Covered Person that discloses Confidential Information without the authorization of the Operating Committee to report such disclosure to the Chair of the Operating Committee, which will then be recorded in the minutes of the meeting of the Operating Committee.[23]

III. Discussion and Modifications by the Commission

Pursuant to Rule 608, the Commission shall approve the amendment, ''with such changes or subject to such conditions as the Commission may deem necessary or appropriate,'' if it finds that the amendment is ''necessary or appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanisms of, a national market system, or otherwise in furtherance of the purposes of the Act.'' [24] After carefully considering the comments received on the Amendment, the Commission is approving the Amendment, as modified by the Commission pursuant to Section 11A of the Act [25] and Rule 608 thereunder. The Commission believes the Plan should have a confidentiality policy, but believes that the modifications

proposed policy as (i) any data or information shared in an Executive Session or that would otherwise qualify for confidential treatment pursuant to the Plan's Executive Session Policy; and (ii) any other highly sensitive Participant-specific, customer-specific, individual-specific, or otherwise sensitive information relating to the Operating Committee, Participants, or customers that is not otherwise Restricted Information. Highly Confidential Information includes: A Participant's contract negotiations with the Processor or Administrator; personnel matters; information concerning the intellectual property of Participants or customers; and any document subject to the Attorney-Client Privilege or Work Product Doctrine.

[14] Confidential Information was defined by the Participants under Section 2(c) of the proposed policy as (i) any non-public data or information designated as Confidential by a majority vote of the Operating Committee; (ii) any document generated by a Participant or Advisor and designated by that Participant or Advisor as Confidential; (iii) the minutes of the Operating Committee or any subcommittee thereof unless approved by the Operating Committee for release to the public; and (iv) the individual views and statements of Covered Persons and SEC staff disclosed during a meeting of the Operating Committee or any subcommittees thereunder.

[15] Public Information was defined by the Participants under Section 2(d) of the proposed policy as (i) any information that is not either Restricted Information or Highly Confidential Information or that has not been designated as Confidential Information; (ii) any confidential information that has been approved by the Operating Committee for release to the public; or (iii) any information that is otherwise publicly available. Public Information includes, but is not limited to, any topic discussed during a meeting of the Operating Committee, an outcome of a topic discussed, or a Final Decision of the Operating Committee.

[16] The Administrator may, under delegated authority, designate documents as Restricted, Highly Confidential, or Confidential, which will be determinative unless altered by a majority vote of the Operating Committee.

[17] *See* Notice, *supra* note 6, 85 FR at 2215.

[18] *See* Section IV.E.(d) of the Nasdaq/UTP Plan (providing for the use of ''Executive Sessions'' in which the Operating Committee meets without members of the Advisory Committee present).

[19] The proposal requires that the policy be made available to the recipient and states that the recipient will be required to abide by the confidentiality policy.

[20] For the representatives of a Participant, the proposal specifies that appropriate remedies include a letter of complaint submitted to the SEC, which may be made public by the Operating Committee. For a member of the Advisory Committee, the proposal specifies that appropriate remedies include removal of that member from the Advisory Committee.

[21] With respect to Confidential Information that is generated by a Participant or member of the Advisory Committee, the Operating Committee may authorize its disclosure only with the consent of that Participant or Advisory Committee member.

[22] The proposal requires that the policy be made available to the recipient and states that the recipient will be required to abide by the confidentiality policy.

[23] The proposal further requires the name(s) of the person(s) who disclosed such Confidential Information to be recorded in any publicly available summaries of Operating Committee minutes.

[24] 17 CFR 608(b)(2).

[25] 15 U.S.C. 78k–1.

discussed in detail below are appropriate.

A. Scope

1. Applicability

In the Notice, the Commission solicited comments on, among other things, whether the proposed guidelines and procedures setting forth the circumstances in which disclosure of confidential information may be authorized are sufficiently clear and comprehensive.[26] Among other questions, the Commission asked whether commenters believe ''that the scope of the proposed Amendment is sufficiently comprehensive to cover all parties that might have access to confidential information, or should the scope be broadened to apply to additional classes of persons.'' For example, the Commission asked whether ''outsourced service providers (including, but not limited to, firms and persons that provide audit services, accounting services, or legal services to the Plan, the Administrator, or the Processor) [should] be subject to additional restrictions, particularly if they are directly or indirectly affiliated with a Participant, the Administrator, the Processor, or any entity that offers separately proprietary data products to a substantially similar customer base, *i.e.,* customers or potential customers of the SIPs.'' [27] The Commission further asked whether the Plan should ''explicitly preclude itself from engaging with an Administrator, Processor, auditor, or any agents or third parties thereof, unless the entity establishes, maintains, and enforces policies and procedures to safeguard confidential and proprietary information and to prevent its direct or indirect misuse'' and, if so, whether ''the Operating Committee [should] review those policies and procedures and/or should they be made public (*i.e.,* provided on the Plan's website).'' [28]

In response to the Notice, the Advisory Committee said it believes that ''the confidentiality policy should extend to any information obtained by outsourced service providers in order to ensure that information learned by such service providers is only shared with those individuals of the Operating Committee required to receive such information and in furtherance of the service provider's agreement with the plan.'' [29] Another commenter similarly stated that ''[o]utsourced service providers (including, but not limited to, firms and persons that provide audit, accounting, or legal services to the Plan(s), the Administrator, or the Processor) should be subject to additional restrictions, particularly if they are directly or indirectly affiliated with a Participant Administrator, Processor, or any entity that offers separately proprietary data products to a substantially similar customer base.'' [30] The commenter further recommended that the ''Plan(s) should explicitly preclude themselves from engaging with an Administrator Processor, auditor, or any agents or third parties thereof, unless the entity attests and adheres to the confidentiality policies and procedures established by the Plan . . . and provides conflicts of interest disclosures.'' [31]

After considering the comments received in response to the Amendment, the Commission believes that it is appropriate to modify the scope of the Amendment to extend it to affiliates and employees of the Operating Committee, a Participant, a Pending Participant, the Administrator, and the Processor. The Commission agrees with commenters that the scope of the proposed Amendment should be broadened to include other parties or persons that might have access to confidential information, including but not limited to outsourced service providers, such as firms and persons that provide audit services, accounting services, or legal services to the Plan, Administrator, or Processor.[32] The Commission believes that all parties that generate, receive, or have access to sensitive Plan-related information by virtue of their service to the Plan, or their affiliation with a party that has such access, should be subject to the same standards to protect the confidentiality of that information. Including them within the scope of the Amendment will strengthen the confidentiality of information protections afforded by the policy.

More specifically, the Commission is concerned about the possibility of a Participant exchange obtaining commercially valuable data and information through its affiliates and employees that have responsibilities to the Plan, and then using that information and/or sharing it with employees or affiliates of the Participant exchange to benefit the exchange's proprietary data businesses. The conflicts resulting from such access could influence decisions as to the Plan's operation and thereby impede its ability to achieve the goals of the Plan to ensure the ''prompt, accurate, reliable, and fair collection, processing, distribution and publication of information with respect to quotations for and transactions in such securities and the fairness and usefulness of the

[26] *See* Notice, *supra* note 6, 85 FR at 2217.

[27] *Id.*

[28] *Id.*

[29] Letter from CTA/UTP Advisory Committee to Vanessa Countryman, Secretary, Commission, dated January 24, 2020 (''Advisory Committee Letter'') at 2.

[30] Letter from Joseph Kinahan, Managing Director, Client Advocacy and Market Structure, TD Ameritrade to Vanessa A. Countryman, Secretary, Commission, dated February 4, 2020 (''TD Ameritrade Letter'') at 9.

[31] *Id.* Other comments received in response to the Commission's separate notice of a proposed order concerning a new NMS plan regarding consolidated equity market data (Securities Exchange Act Release No. 87906 (January 8, 2020), 85 FR 2164 (January 14, 2020) (File No. 4–757) (''Governance Notice'') also supported a robust confidentiality policy that would apply to SRO and non-SRO persons. *See, e.g.,* Letter from Sherry Madera, Chief Industry Government Affairs Officer, Refinitiv, to Vanessa Countryman, Secretary, Commission, dated February 27, 2020 at 3; Letter from Lisa Mahon Lynch, Associate Director, Global Trading, Wellington Management Company LLP, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 2; Letter from Anders Franzon, General Counsel, Members Exchange LLC, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 6; Letter from Jennifer W. Han, Associate General Counsel, Managed Funds Association, and Adam Jacobs-Dean, Managing Director, Global Head of Markets Regulation, Alternative Investment Management Association, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 5; Letter from Ellen Greene, Managing Director, Equity & Options Market Structure, Securities Industry and Financial Markets Association, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 6; Letter from Rich Steiner, Head of Client Advocacy and Market Innovation, RBC Capital Markets, LLC, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 4; Letter from Joe Wald, Chief Executive Officer, and Ray Ross, Chief Technology Officer; Clearpool Group, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 5; Letter from Daniel Keegan, Head of North America Market Securities Services, Co-Head of Global Equities & Securities Services, Citigroup Global Markets Inc., to Vanessa Countryman, Secretary, Commission, dated March 2, 2020 at 4.

[32] Firms and persons that provide audit services, accounting services, or legal services, depending on the services that they are performing for the Plan, may or may not be licensed and/or registered if they are not otherwise required to be so licensed or registered under applicable law. For example, a person that works on audits of SIP subscribers' data usage and customer classifications for compliance with SIP billing requirements might not herself be a registered public accountant. Persons that are registered and/or licensed may be subject to pre-existing professional standards of conduct that separately provide for the protection of confidential client information and impose other professional responsibility obligations. Whether persons are licensed and/or registered or not, the Commission believes that extending the Amendment to cover affiliates and employees is appropriate to ensure the protection of confidential information in light of the unique conflicts of interest inherent in Plan governance and operations. To the extent disclosure of confidential information is required by law or professional ethics obligations, the proposed Amendment provides for that possibility and allows such disclosure.

form and content of such information.'' [33]

Accordingly, the Commission is adding the phrase ''affiliates, employees, and'' to Section 1(b) and repeating the phrase ''a Participant, a Pending Participant, the Administrator, and the Processor,'' to provide that the policy will apply to ''affiliates, employees, and agents of the Operating Committee, a Participant, a Pending Participant, the Administrator, and the Processor.'' [34] Similarly, the Commission is adding the phrase ''Covered Persons'' to the start of Section 1(c) and deleting the words ''The Administrator and Processor,'' to track the scope of Section 1(b) and the term ''Covered Persons'' used therein. The Commission also is moving text, beginning with the second sentence of Section 1(c), to create a new Section (d) and adding thereto the phrase ''and the control of their Agents,'' to specifically require the written confidential information policies, which the Administrator and Processor must establish to protect information under their control, to also apply to information under the control of Agents of the Administrator and Processor. The Participants state that these provisions, like all others in the proposal, were discussed with, and incorporate input and comments received from, members of the Advisory Committee.[35] Consistent with comments received in response to the proposed Amendment from, among others, members of the Advisory Committee, however, the Commission believes that these changes are appropriate to help ensure that the scope of the proposed Amendment is sufficiently broad so as to encompass other parties or persons that might have access to confidential information.

Further, the Commission believes that it is appropriate to modify the reference to ''all members of the Advisory Committee'' in Section 1(b) to be ''all members of the Advisory Committee and their employers'' to require that Advisory Committee members' firms must protect the confidentiality of Plan information in the same way, for example, that a representative of a Participant's firm is required by this modified Amendment to protect the confidentiality of Plan information.[36] In addition, Section 1(b) of the proposed policy provides that ''[a]ll Covered Persons must adhere to the principles set out in this Policy.'' The Commission believes that it is appropriate to modify Section 1(b) to add a provision whereby ''all Covered Persons that are natural persons may not receive Plan data and information until they affirm in writing that they have read this Policy and undertake to abide by its terms.'' The Commission believes that this additional provision will strengthen Section 1(b) of the policy by prohibiting access to Plan data and information until a Covered Person has affirmed in writing that the Covered Person has read the policy and undertaken to abide by its terms.

2. Classification Based Solely on Content

With respect to proposed guidelines for the classification of information, the Commission solicited comments on whether information shared in Executive Sessions should be classified as Highly Confidential simply because it had been shared in an Executive Session, or whether information should ''be classified based solely on its content and competitive sensitivity.'' [37]

In response, one commenter stated its belief that ''information shared in Executive Session should be classified based solely on its content and competitive sensitivity, and not simply due to the fact that such information was shared during Executive Session.'' [38] Another commenter stated that ''information shared in Executive Session should not, by virtue of that fact alone, be treated as highly confidential. Rather, a case-by-case analysis is appropriate to determine whether or not information warrants confidential treatment.'' [39]

The Commission agrees with commenters that policies and procedures for the classification of information should be based on the content and sensitivity of the information, rather than on the venue in which the information is shared.

The Commission is therefore adding new Section 1(e) to require that ''[i]nformation will be classified solely based on its content.'' Consistent with that modification, the Commission believes that it is appropriate to modify the definition of ''Highly Confidential Information'' in Section 2(b) to delete therefrom a clause that would have classified information as ''Highly Confidential'' solely because it was shared in Executive Session or pursuant to the Executive Session policy. Specifically, the Commission is deleting subsection (i) containing the words ''(i) any data or information shared in an Executive Session or that would otherwise qualify for confidential treatment pursuant to the Plan's Executive Session Policy; and (ii)'' and making a conforming change to delete the word ''other'' from the start of current subsection (ii).[40] The Participants state that Executive Sessions are used sparingly to discuss a limited set of topics, as listed in the Plan's Executive Session policy, and that the proposed policy seeks to further facilitate the sharing of additional confidential information with the Advisory Committee.[41] The Commission recognizes the Operating Committee's efforts to limit the use of Executive Sessions. Consistent with comments received, however, the Commission believes that methods for classification of information should be based on the content and sensitivity of information, rather than on the forum in which the information is shared.

Executive Sessions may be appropriate for Participants to discuss information that, on its own merits, is Highly Confidential and therefore not appropriate for broad dissemination. Executive Sessions should not shield from public dissemination information that is not sensitive or customer-specific and would not otherwise fall within the definitions of Restricted or Highly Confidential. But by classifying information based merely upon its being shared in Executive Session, the proposed policy may have the effect of shielding information that was not otherwise restricted or confidential. The Commission believes that a content-based approach to classifying information should help balance the need to safeguard sensitive information

[33] 15 U.S.C. 78k–1(c)(1)(B).

[34] In addition, in the non-exhaustive list of Agents contained in Section 1(b), the Commission is adding the word ''auditors.'' While auditors are already covered as ''contractors or subcontractors,'' auditors have access to competitively sensitive non-public information. Explicitly listing them avoids any doubt that they are covered by the confidentiality policy.

[35] *See* Notice, *supra* note 6, 85 FR at 2214, 2215.

[36] This change, together with other modifications made by the Commission, should enhance the ability of Advisory Committee members to seek meaningful input from their respective employers while helping to ensure that standards for the sharing of protected information apply on equal terms to all Covered Persons. *See* Section 3(d)(iii) (allowing the Operating Committee to authorize Advisors to disclose particular Confidential Information for consultation purposes).

[37] *See* Notice, *supra* note 6, 85 FR at 2217.

[38] TD Ameritrade Letter, *supra* note 30, at 7. According to the commenter, ''[a]llowing information to be classified based on its content provides for a flexible policy that will mature without the need for amendment as markets evolve.'' *Id.*

[39] Letter from Rich Steiner, Head of Client Advocacy and Market Information, RBC Capital Markets, to Vanessa Countryman, Secretary Commission, dated February 4, 2020 (''RBC Letter'') at 2–3.

[40] As such, the definition no longer contains two subsections.

[41] *See* Notice, *supra* note 6, 85 FR at 2213.

with the important interest of providing greater transparency into the governance and operation of the Plan. The Commission does not believe that its modifications will inhibit information sharing within the Operating Committee. Rather, sensitive information, as well as information that is specific to individual persons and entities, that is Highly Confidential will continue to be protected, including through permissible use of Executive Sessions, while information that does not meet that standard can and should be shared with Advisors on the Operating Committee and, where appropriate, with the public.

3. Operating Committee Review of Policies

In the Notice, with respect to proposed policies and procedures for the classification of information, the Commission solicited commenters' views with respect to whether ''a need may arise for information or data that are not initially categorized as confidential to be categorized as such at a later point in time'' and, if so, whether the Operating Committee should ''be able to classify or de-classify material as appropriate based on a majority vote.'' [42] Similarly, the Commission asked whether the Amendment ''should require all Participants and other Covered Persons to establish, maintain, and enforce policies and procedures to safeguard confidential and proprietary information received via their participation in the Plan and to prevent its misuse by such Participants or entities controlling, controlled by, or under common control with such Participants.'' [43] The Commission further asked whether commenters agree ''that certain confidential information may become less sensitive if it is anonymized and aggregated'' and even whether ''certain types of restricted or highly confidential information could be anonymized and aggregated to the point where it could be classified as public.'' [44] The Commission asked about the methodology for anonymizing confidential information and whether the methodology should be standardized.[45] The Commission also asked whether these policies should ''be subject to review and approval by the Operating Committee, and be posted publicly, to help ensure their adequacy and completeness.'' [46]

In response, one commenter stated ''the Plan(s) should explicitly define the required policies and procedures to safeguard confidential and proprietary information'' and designate responsibility for their development to one body to ensure a standardized approach.[47] With respect to the classification of data or information, the commenter stated that ''a need may arise for information or data that are not initially categorized as confidential to be categorized as such at a later point in time,'' pointing out that one ''would anticipate the Plan Administrator may classify such document as Confidential subject to the next meeting of the Operating Committee, where they should be granted authority to review and re-classify or de-classify material as appropriate based on a majority vote.'' [48] With respect to methods for rendering information less sensitive, the commenter believed that ''[c]ertain confidential information may become less sensitive if it is anonymized and aggregated,'' adding that ''[c]ertain types of restricted or highly confidential information could be anonymized and aggregated to the point where it could be classified as confidential or public.'' [49] According to the commenter, ''[t]he methodology for redacting/aggregating/anonymizing confidential information should be standardized such that the Administrator, Processor, auditor, and all other relevant parties follow a consistent practice. The methodology should include requirements for what information should always be redacted/aggregated/anonymized (*e.g.,* customer names, size/demographic information that could reasonably be used to determine the name of the customer, etc.).'' [50] The commenter recommended that ''[i]f any information that is anonymized, aggregated or redacted could still reasonably be used, whether independently or with current information available in the industry, to identify less than or equal to two firms/Participants, then such information may not be re-classified to public.'' [51]

After considering the comments received in response to the Notice, the Commission believes that it is appropriate to modify Section 1(c) (now located in Section 1(d)), which requires the Administrator and Processor to establish written confidentiality policies, to more specifically provide that those documents should include ''policies and procedures that provide systemic controls for classifying, declassifying, redacting, aggregating, anonymizing, and safeguarding information.'' The Commission believes that adding this detail is appropriate because it outlines the items that the written confidentiality policies must, at a minimum, address in order to protect the confidentiality of Plan information.

In addition, the Commission believes that it is appropriate to require the Operating Committee to review and approve the confidentiality policies of the Administrator and Processor, upon adoption and on a periodic basis every two years thereafter or whenever changes are made, after which the policies would be publicly posted. As proposed, the policies would have been made available to the Operating Committee every two years or when changes are made.

The Commission believes that requiring the Operating Committee to review and approve these important policies in this manner will help ensure that they are clear, complete, and comply with the Amendment. The Commission believes it is appropriate specifically to require the Operating Committee to affirmatively approve (in addition to ''review'') the policies to ensure that the Operating Committee carefully considers and takes action on them. Requiring robust policies at the Administrator and Processor level, where some of the most sensitive information is generated, classified, and maintained for the Plan, is critical to the effectiveness of the Amendment. The Operating Committee can play an important role in protecting confidential information by carefully reviewing the policies of the Administrator and Processor and ensuring that they are consistent with the principles and procedures established in this Amendment. Finally, the Commission believes that it is appropriate to require the policies and procedures to be made publicly available, which will provide important transparency to market participants and the public about the steps the Processor and Administrator take to protect commercially sensitive information collected on behalf of the Plan. Further, the Commission believes that transparency via public dissemination should be favored to the greatest extent possible, and that when sensitive information can be anonymized or aggregated to reduce its sensitivity, such information should be anonymized and aggregated in accordance with a clear, standardized methodology to be consistently applied by Administrator and Processor. Thus, as revised, the Commission believes that

[42] *Id.* at 2217.
[43] *Id.* at 2216–2217.
[44] *Id.* at 2217.
[45] *Id.*
[46] *Id.*
[47] TD Ameritrade Letter, *supra* note 30, at 4.
[48] *Id.* at 6.
[49] *Id.* at 9.
[50] *Id.*
[51] *Id.*

Section 1(d) creates an effective process to develop clear and robust confidentiality policies for the Administrator and Processor, and to periodically update such policies as technology and markets evolve.

B. Definitions: Public Information

In the Notice, the Commission solicited comments on, among other things, whether certain SIP-related information should be considered public and available to be shared outside of the Operating Committee.[52] The Commission further asked whether ''information that is not classified at some level of confidentiality should be considered public and may be shared freely outside of the Operating Committee.'' [53] The Commission also solicited comment on whether Advisory Committee members needed access to sensitive information of substantial commercial and competitive value in order to perform their duties, such as underlying information relied on by Participants when making decisions on funding improvements to the SIP.[54]

In response, one commenter stated that ''[i]nformation that is not classified at some level of confidentiality should be considered public and may be shared freely outside of the Operating Committee. Specific information that [the commenter] believes should be considered public and shared outside of the Operating Committee may include shared Plan revenue information, industry subscriber and quote metrics, Processor transmission metrics and Operating Committee minutes.'' [55] According to the commenter, ''[t]his information provides transparency into the operation of the Plan(s), valuable for making determinations on the efficacy of Plan operations.'' [56] Two commenters supported the adoption of specific policies to specify what information should be made available outside of Executive Sessions or otherwise.[57] One commenter expressed concern about ''the inclusion of the individual views and statements of Covered Persons during a meeting of the Operating Committee as Confidential Information'' and suggested that ''at a minimum, a summary of direction/votes made by Covered Persons should be included in Committee Minutes, which would become public information.'' [58] According to the commenter, ''[w]ithout transparency into the views attributable to individual Covered Persons responsible for directing Plan operations through their role on the Operating Committee, members of the public, as consumers of plan data, would be unable to determine whether those Covered Persons were acting in the best interests of the Plan(s) and were effective in their roles.'' [59] One commenter supported disclosure of audited financial information and data and the use of funds by the Plan.[60] Another commenter stated that ''the public deserves to know how much profits the exchanges make . . . [and] information that is currently non-public about the costs and operations [of the Plan].'' [61]

One commenter expressed concern ''regarding the classification of all contracts between the Operating Committee and its agents as Confidential Information,'' stating that ''anyone with an interest in the Plan(s) should have sufficient transparency into the agents utilized by the Plan(s) to be able to contextualize and understand whether or not a conflict of interest may exist between the Operating Committee and contracted agents.'' [62] According to the commenter, this ''may be a situation in which the Plan(s) allow for the flexibility to redact sensitive information from certain documents (*e.g.,* pricing terms and conditions) and allow the classification of such information to remain public.'' [63]

As discussed above regarding the classification of Plan-related information based solely on its content, the Commission believes that public availability of information should be favored to the greatest extent possible while still protecting sensitive information. After considering the comments received in response to the Notice, the Commission believes that this principle extends to certain information discussed by or relied upon by the Participants when making decisions on the administration and operation of the SIPs. Making this information public, so that members of the Advisory Committee and others can review it, will provide Advisors and members of the general public with access to previously unavailable information on the administration and operation of the SIPs, which serve an important public function in the equities market. The SIPs are critical regulatory market infrastructure, authorized by Congress and operated jointly by self-regulatory organizations as a key part of the securities markets, which Congress categorized as ''an important national asset.'' [64] Market participants rely on the SIPs to inform their trading and assure their regulatory compliance efforts. Requiring greater transparency into the Plan's operations should provide market participants and the general public with a more comprehensive understanding of Plan operations, which should, in turn, facilitate their ability to make informed assessments and actively contribute, whether through feedback, input, or otherwise, to the effective governance of the Plan. And classifying the information discussed below as Public Information will facilitate market participants' and the public's ability to track, assess, and contribute to SIP governance and operations and therefore is consistent with the public interest, the protection of investors, and the maintenance of fair and orderly markets.

While the proposed policy defines the term ''Public Information,'' the proposal does not expressly provide that any specific, identifiable information or data relating to plan governance, operations, or administration is public, other than, as an illustrative example, ''any topic discussed during a meeting of the Operating Committee, an outcome of a topic discussed, or a Final Decision of the Operating Committee. . . .'' [65] Defining more information on Plan governance, operations, and administration as ''Public Information,'' while still protecting sensitive information, should strengthen Plan administration and governance by promoting transparency, thereby facilitating review and feedback from market participants and the public. In addition, the Advisory Committee members and other firms and members of the public currently are prevented from seeing much of the underlying information relied on by the Participants when making decisions on funding of and improvements for the SIP. With greater access to information on the Plan's governance, operations, and administration, Advisors will be

[52] *See* Notice, *supra* note 6, 85 FR at 2217.

[53] *Id.*

[54] *See id.* at 2217–2218.

[55] TD Ameritrade Letter, *supra* note 30, at 7.

[56] *Id.*

[57] *See* Letter from Jeff Brown, Senior Vice President—Legislative and Regulatory Affairs, Charles Schwab, to Vanessa Countryman, Secretary, Commission, dated February 4, 2020 (''Charles Schwab Letter''), at 3 and RBC Letter, *supra* note 39, at 3.

[58] TD Ameritrade Letter, *supra* note 30, at 5–6.

[59] *Id.*

[60] *See* Charles Schwab Letter, *supra* note 57, at 3.

[61] Letter from Tyler Gellasch, Executive Director, Healthy Markets Association to Vanessa Countryman, Secretary, Commission, dated February 20, 2020 (''Healthy Markets Letter''), at 20.

[62] TD Ameritrade Letter, *supra* note 30, at 6.

[63] *Id.* The Commission is not modifying the Amendment to specifically include this requirement, but the Operating Committee could consider this suggestion.

[64] 15 U.S.C. 78k–1(a)(1)(A).

[65] *See* Section 2(d) of the policy as proposed.

better able to perform their responsibilities and will have the benefit of feedback from other firms and members of the public to inform their decision-making. The Operating Committee will correspondingly benefit from a valuable source of better informed input.

Thus, the Commission believes that it is appropriate to modify the definition of ''Public Information'' in Section 2(d) to include the following additional items of information: [66]

- The duly approved minutes of the Operating Committee and any subcommittee thereof with detail sufficient to inform the public on matters under discussion and the views expressed thereon (without attribution),[67]
- Plan subscriber and performance metrics, and
- Processor transmission metrics.

With respect to the public availability of the duly approved minutes for each meeting, the Commission is not requiring publicly available minutes to include legally privileged, Restricted, or Highly Confidential Information. Rather, the duly approved minutes generally must reflect, at a minimum, what entity met, the time and date of the meeting, the parties present, the topics discussed and views expressed thereon (without attribution), and the decisions made and votes recorded. Defining this information as ''Public Information'' will facilitate broader awareness of the governance of the critical market infrastructure for which the Participants are responsible under the Plan. In turn, broader awareness of Plan governance can facilitate the ability of market participants and the public to comment and provide input on important matters being considered by the Participants for the SIPs, which ultimately will promote fair and orderly markets and the protection of investors in the public interest to extent their input helps shape future Plan initiatives and strengthen the SIPs on which market participants and the public rely.

Finally, the Commission believes, as supported by the commenter discussed above, that certain core metrics on the Plan's subscribers, performance, and data transmission should be public information in order to promote transparency of the Plan's operation and oversight. The Plan already makes such information publicly available, and specifically including it within the definition of Public Information recognizes that fact and ensures that such information, as well as similar information that may be prepared in the future, can continue to be made publicly available.[68]

Public availability of Plan subscriber and performance metrics and Processor transmission metrics affords a limited, basic level of transparency of the key metrics associated with Plan operations, such as number of subscribers by category, system availability metrics, latency, and other information. Public transparency of this information, some of which already currently occurs, should provide greater transparency into important aspects of the Plan's operation and oversight. As noted above, the SIPs are critical regulatory market infrastructure, operated jointly by self-regulatory organizations providing quote and trade information upon which market participants and the public rely and which Congress categorized as ''an important national asset.'' [69] As market participants rely on the SIPs to inform their trading and assure their regulatory compliance efforts, they have an interest in effective Plan operations and ensuring that the SIPs keep pace with evolving technology, markets, and regulatory developments. Classifying Plan subscriber and performance metrics and Processor transmission metrics as ''Public Information'' will facilitate market participants' and the public's ability to monitor, assess, and contribute to improving SIP operations and the ability of the SIPs to fulfill their purpose as critical market infrastructure as the markets evolve, thereby facilitating the maintenance of fair and orderly markets in the future.

For the reasons discussed throughout this order, the Commission believes that transparency of key Plan information, including duly approved Operating Committee meeting minutes, and performance, subscriber, and transmission metrics, is consistent with the public interest, the protection of investors, and the maintenance of fair and orderly markets.[70]

C. Procedures

1. General Procedures

As discussed above, the Commission believes that it is appropriate to modify the Amendment to require the Administrator and Processor to establish written confidentiality policies, which, among other things, address the safeguarding of confidential information. As a conforming change to Section 3(a)(iii), which requires the Administrator to ensure that documents are properly labeled, the Commission is modifying that provision to include the phrase ''and, if applicable, electronically safeguarded.'' [71] This conforming modification reflects the fact that the Administrator would be required to safeguard electronic documents within its control and/or possession such as by, for example, encrypting them during transmission and/or protecting them with a password or other access control.

2. Procedures for Restricted and Highly Confidential Information

In the Notice, the Commission solicited comments on, among other things, whether commenters believe ''that Participants involved in the operation or governance of each Plan have, by consequence of their position,

[66] Further, the Commission is adding the phrase ''except to the extent covered by (a), (b), or (d)'' to the start of Section 2(c) to reflect that nothing in Section 2(c) can alter what is defined as Restricted, Highly Confidential, or Public. For example, the Operating Committee, a Participant, or an Advisor could not designate as Restricted Information, Highly Confidential Information, or Confidential Information something that falls within the definition of Public Information. The Commission also is modifying the definition of ''Public Information'' under Section 2(d)(vi) concerning ''any information that is otherwise publicly available'' to add the phrase ''except for information made public as a result of a violation of this Policy or any applicable law or regulation'' to clarify that ''otherwise publicly available'' refers to information that is legally and appropriately within the public domain.

[67] The Commission also is making a conforming change to Section 2(c) to reflect this provision by deleting subsection (iii) which, as proposed, stated: ''the minutes of the Operating Committee or any subcommittee thereof unless approved by the Operating Committee for release to the public.''

[68] *See* Metrics published by the Plan, *available at https://www.utpplan.com/metrics.* Current subscriber metrics publicly disseminated include quarterly statistics on nonprofessional subscribers, professional subscribers, households, quote usage, internal vendors, external vendors, and non-display vendors. Current key operating metrics publicly disseminated by the Plan include statistics on system availability, peak messages (for certain defined periods of time), capacity messages (for certain defined periods of time), capacity versus peak ratios, peak transactions per day, capacity transactions per day, average and median latency, and various percentile latencies. As modified, the Amendment provides that this category of information will be considered Public Information. Accordingly, similar information prepared in the future that falls under these categories will be classified as Public Information.

[69] 15 U.S.C. 78k–1(a)(1)(A).

[70] The Plan currently publishes information on plan operations, including summaries of the General Sessions from the Operating Committees' quarterly meetings, plan policies, quarterly and monthly performance metrics, pricing schedules, and technical specifications. The Plan also makes publicly available certain information on SIP-related revenues, including trade and quote revenue distributed to Participants, per trade and quote message revenue (in aggregate) distributed to Participants, and revenue earned by fee type. This revenue data is updated on a quarterly basis, with a 60 day lag, and is available on the Plan's website at *http://www.utpplan.com/metrics.*

[71] The Commission also is modifying Section 3(a)(iii) to add the word ''The'' before the word ''Administrator.''

access to information of substantial commercial and competitive value.'' [72] If so, the Commission asked commenters to consider whether ''certain of that information, including customer-specific financial information, customer-specific audit information, personally identifiable information, and information concerning the intellectual property of Participants or customers, is highly sensitive to such a degree that its possession and use should be more tightly controlled.'' [73]

The Commission asked whether ''any Participant or Advisory Committee member that is directly involved in the management, sale, or development of similar proprietary market data products that may be sold to customers of the SIPs should have access to any customer information from the SIPs'' or whether Operating Committee members, as well as the Administrator, Processor, and auditor ''should be prohibited, unless otherwise required by law, from sharing confidential information with individuals that are not involved with the operation of the Plan and individuals employed by or affiliated with the same entity if such individuals are involved in the management, sale, or development of proprietary data products that are offered separately to a substantially similar customer base, *i.e.,* customers or potential customer of the SIPs.'' [74]

With respect to the Participants' representatives, the Commission sought comment on whether ''Participants' representatives should be subject to restrictions and/or information barriers as part of the confidentiality policy to address their direct or indirect involvement in the development or sale of proprietary data products to SIP customers.'' [75] The Commission further asked for comment on whether ''Participants' access to a list of the Processor's customers as well as information on those customers' data usage and fees paid to the Plan has competitive implications'' and, if so, whether ''the Plan should require recusal in certain circumstances (*e.g.,* during Executive Sessions or Operating Committee meetings) because the potential for misuse of competitively sensitive confidential information is too great.'' [76]

Further, the Commission solicited comment on whether additional protections are needed when ''a Participant is either employed by or affiliated with an entity that offers proprietary data products that are offered for sale to a substantially similar customer base (*i.e.,* customer or potential customers of the SIPs).'' [77] The Commission also requested comment on whether a Participant should be able to share information with other employees and agents, asking whether ''outsourced service providers (including, but not limited to, firms and persons that provide audit services, accounting services, or legal services to the Plan, the Administrator, or the Processor) [should] be subject to additional restrictions, particularly if they are directly or indirectly affiliated with a Participant, the Administrator, the Processor, or any entity that offers separately proprietary data products to a substantially similar customer base, *i.e.,* customers or potential customers of the SIPs.'' [78] In response to the Notice and requests for comment as to whether the proposed Amendment should be further enhanced, the Commission received comments and input from the Advisory Committee to the Plan, as well as from several other commenters. The Advisory Committee had concerns with the proposed situations in which Highly Confidential and Confidential information may be shared by a Participant representative and Advisors. The Advisory Committee explained that:

> Under the proposed policy, Highly Confidential and Confidential information may each be shared by a representative of a Participant 'to other employees or agents of the Participant or its affiliates only as needed for such Covered Person to perform his or her function on behalf of the Participant, as reasonably determined by the Covered Person.' We believe this standard is insufficient. The rationale that information may be shared 'to perform his or her function on behalf of the Participant' assumes that the representative's role on the committee is to further the interests of the Participant rather than the plan—this strikes at the heart of the conflict of interest inherent in the governance of the plan. Such information should only be shared to further the interests of the plan, and such sharing should at least be disclosed to and potentially authorized by the Operating Committee. In situations where the Participant representative is subject to a conflict due to their own responsibility regarding the sale of proprietary exchange data, the policy should limit access to such confidential information by the Participant representative.[79]

One commenter stated that the proposed policy should include ''requirements to prevent the sharing of information with a competitive value to those individuals who have direct responsibility for the management, sale, or development of proprietary data products offered separately.'' [80] The commenter recommended that control procedures for restricted, highly sensitive or confidential information ''should be explicitly defined'' and should include ''required logging of the sharing of Restricted and Highly Confidential Information,'' the ''required use of common logical security controls'' such as encryption and password protection, and ''standardized procedures for the redaction/aggregation/anonymization of information.'' [81] The commenter also stated that with respect to Restricted and Highly Confidential Information, the policy should not allow for the automatic sharing of information between the Administrator and Processor or the Participant and its employees or agents unless required for performance of responsibilities as required by the Plan; the commenter cited customer audit information as an example.[82] With respect to sharing Restricted Information, the commenter also stated its belief that if unredacted information is shared in Executive Session, ''the Administrator should also ensure that no parties with a conflict of interest are present in such session, or if so, should develop procedures to require that individual's recusal to ensure they do not receive information or significant competitive value.'' [83] With respect to the classification of information or data generated or discussed by the Operating Committee, the commenter stated its belief that the proposal should give non-SRO members information available in executive session, because ''[n]on-SRO members may provide valuable feedback and insight into decisions made with respect to an Administrator, Processor, auditor, or third-party service provider.'' [84] An additional commenter stated that ''if the Administrator function is staffed by personnel of one of the Participant exchanges, there must be a separation of functions'' and those personnel ''should

[72] Notice, *supra* note 6, 85 FR at 2216.

[73] *Id.*

[74] *Id.*

[75] *Id.*

[76] *Id.* While the Commission is not modifying this Amendment to require recusal, it is, as discussed below, modifying provisions concerning the disclosure of Highly Confidential Information and Confidential Information to others. In addition, the Commission separately is approving modified amendments to address the Plan's conflicts of interest policies, which, as approved, do provide for recusal in certain circumstances. *See* Securities Exchange Act Release No. 88824 (May 6, 2020).

[77] Notice, *supra* note 6, 85 FR at 2217.

[78] *Id.*

[79] Advisory Committee Letter, *supra* note 29, at 2.

[80] TD Ameritrade Letter, *supra* note 30, at 3.

[81] *Id.* at 2–3. These detailed suggestions are beyond the scope of this Amendment, but the Operating Committee could consider them in the appropriate context.

[82] TD Ameritrade Letter, *supra* note 30, at 3.

[83] *Id.*

[84] *Id.* at 6–7.

not be employed by the Participant's proprietary data business line, and they should not share with the Participant's proprietary data business line confidential SIP information obtained in their role as administrator.'' [85]

After considering the comments received, the Commission believes that it is appropriate to modify the procedures concerning Restricted Information and Highly Confidential Information. Given that Restricted Information and Highly Confidential Information both contain highly sensitive and entity-specific information, the Commission believes that Covered Persons in possession of such information should protect that information in a substantially similar way by not disclosing it to others, including Agents and outside affiliated persons, unless an exception exists.[86]

The parties involved in the governance of the Plan and the SIP are privy to confidential and proprietary information generated in connection with the Plan. The Commission believes it is important to protect the confidentiality of certain SIP-related information because some Participant exchanges or their affiliates have a dual role as both an SRO jointly responsible for the operation of the Plan, on one hand, and, on the other hand, as part of a publicly held company that offers proprietary data products and connectivity services. As a consequence of this dual role, an exchange's representative on the Plan's Operating Committee may have conflicting responsibilities both to the exchange's proprietary data business as well as to the SIP. These potential conflicts of interest are of particular concern because the proprietary data products offered by an exchange generate revenue in addition to the revenue the exchange receives from the Plan.

Allowing sensitive Plan-related information to be shared with and disclosed to non-Plan personnel of the Participant—particularly those responsible for the Participant's own proprietary data business that competes with the SIP—could create a potential conflict. The Commission is concerned about the potential for such sharing as non-Plan personnel likely would have no need to know such information as they have no responsibilities to the Plan. Further, if Restricted Information or Highly Confidential Information is disclosed to those persons, such persons could use the competitively valuable non-public information for purposes unrelated to, and potentially inconsistent with, Plan business. The Commission believes that Restricted Information and Highly Confidential Information generated in connection with the operation of the Plan and its SIP should be retained in the confidences of Plan and SIP personnel not used in ways that could potentially harm the interests of the Plan to the extent the information is used to further the competitive advantage of a Participant.

Therefore, the Commission is modifying Section 3(b)(i), which says that Restricted Information will be kept in confidence by the Administrator and Processor, to begin that subsection with the following: ''Except as provided below, Covered Persons in possession of Restricted Information are prohibited from disclosing it to others, including Agents. This prohibition does not apply to disclosures to the staff of the SEC or as otherwise required by law or to other Covered Persons as expressly provided for by this Policy.'' [87] The change is intended to assure that the Administrator and Processor, who are required by the policy to ''[keep] in confidence'' Restricted Information, do not disclose that information to outside persons who may be directly or indirectly affiliated with them, including employees, agents, service providers, and subcontractors. The Commission believes it would be inconsistent with the ''[keep] in confidence'' standard for the Administrator or Processor to disclose Restricted Information to affiliated persons, and is thus modifying the Amendment to state so explicitly. The Commission believes that Restricted Information, including personally identifiable information, customer-specific financial information, and audit information, is highly sensitive to such a degree that its possession and use should be tightly controlled.

In addition, the Commission is modifying Section 3(c)(i)(1) to be parallel to the Section 3(b)(i)(1) on Restricted Information. As modified, Section 3(c)(i)(1) reads: ''Except as provided below, Covered Persons in possession of Highly Confidential Information are prohibited from disclosing it to others, including Agents. This prohibition does not apply to disclosures to the staff of the SEC or as otherwise required by law or to other Covered Persons authorized to receive it.'' The Commission believes that the proposed Amendment's restrictions on the disclosure of Highly Confidential Information to an Executive Session of the Operating Committee or to the Legal Subcommittee reflect the highly sensitive and commercially valuable nature of that information. In light of the value and sensitivity of such information, the Commission shares commenters' concerns about circumstances in which a Participant's representative, who has access to the information, may be involved in the development or sale of proprietary data products to a customer base similar to that of SIP customers. Thus, the Commission believes that the use and possession of Highly Confidential Information should be tightly controlled to prevent a Participant's representative from disclosing such information to affiliated persons.

3. Procedures for Confidential Information

Most of the questions and potential modifications in the Notice discussed above for Restricted Information and Highly Confidential Information also relate to Confidential Information. In addition, in the Notice, the Commission also solicited comments on, among other things, whether ''commenters believe that the Plan should require all Participants and other Covered Persons to establish, maintain, and enforce policies and procedures to safeguard confidential and proprietary information received via their participation in the Plan and to prevent its misuse by such Participants or entities controlling, controlled by, or under common control with such Participants.'' [88] More specifically, the Commission asked whether commenters ''believe that the proposed provisions allowing Participants to disclose confidential and highly confidential information to other employees or agents of the Participant or its affiliates as needed as they reasonably determine'' are appropriate.[89] Among other things, the Commission also solicited comments on whether Participants' representatives should be subject to restrictions and/or information barriers to address their direct or indirect involvement in the development or sale of proprietary data products to SIP customers.[90]

[85] Charles Schwab Letter, *supra* note 57, at 2–3.

[86] *See* Section 2(a) of the Amendment, defining Restricted Information (as including ''highly sensitive customer-specific'' information as well as ''Personal Identifiable Information'') and Highly Confidential Information (as including ''highly sensitive Participant-specific, customer-specific, individual-specific, or otherwise sensitive information'').

[87] In addition, the Commission is modifying Section 3(b)(i)(3) to add ''staff of the'' in front of ''SEC'' to conform to Section 3(b)(i)(1).

[88] Notice, *supra* note 6, 85 FR at 2216–2217.

[89] *Id.* at 2217.

[90] *See id.* at 2216.

In response to the Notice, including the Commission's solicitation of comments on these issues and on whether the proposed Amendment should be further enhanced, the Advisory Committee stated that ''Advisors may only share Confidential Information to solicit industry feedback and then only if specifically authorized by the Operating Committee'' and recommended that there ''is no reason for Participant representatives and Advisors to have different standards for sharing information—in each case it should only be to further the interests of the plan, and the standard for determining that threshold should be equivalent.'' [91] The Advisory Committee further recommended that the provisions protecting Confidential Information ''should extend to any information obtained by outsourced service providers in order to ensure that information learned by such service providers is only shared with those individuals of the Operating Committee required to receive such information and in furtherance of the service provider's engagement and the plan.'' [92]

As discussed above in the context of Restricted Information and Highly Confidential Information, the Advisory Committee also objected to the proposed standard that would allow a Participant's representative to share Highly Confidential Information and Confidential Information ''to other employees or agents of the Participant or its affiliates only as needed for such Covered Person to perform his or her function on behalf of the Participant, as reasonably determined by the Covered Person.'' [93] Believing that standard to be ''insufficient,'' the Advisory Committee criticized that provision as assuming ''that the representative's role on the committee is to further the interests of the Participant rather than the plan,'' which the Advisory Committee said ''strikes at the heart of the conflict of interest inherent in the governance of the plan.'' [94] The Advisory Committee recommended that confidential information ''should only be shared to further the interests of the plan, and such sharing should at least be disclosed to and potentially authorized by the Operating Committee'' and where a Participant's representative ''is subject to a conflict due to their own responsibility regarding the sale of proprietary exchange data, the policy should limit access to such confidential information by the Participant representative.'' [95]

One commenter agreed that the standard should be the same for all Covered Persons, and that any confidential information should be shared ''as reasonably determined to perform [the Covered Person's] function.'' [96] Another commenter believed that control procedures need to be sufficient to prevent disclosure to ''individuals without specific reason to receive such information to address their responsibilities according to the Plan(s) requirements.'' [97] That commenter recommended that the proposed policy include ''requirements to prevent the sharing of information with competitive value to those individuals who have direct responsibility for the management, sale, or development of proprietary data products offered separately.'' [98] The commenter further recommended that, given the potential conflicts of interests involved and the difficulties associated with mitigating such conflicts, ''Participants should be explicitly prohibited from disclosing restricted, highly confidential and confidential information to other employees or agents of the Participant or its affiliates unless authorized to do so on a case-by-case basis from the Operating Committee, and only if required to do so for such individual to perform his or her function on behalf of the Plan, unless such disclosure is required by law.'' [99]

After considering the comments received, the Commission believes it is appropriate to modify the Amendment concerning the procedures for protecting Confidential Information. First, the Commission is modifying Section 3(d)(i), which currently allows Covered Persons to disclose Confidential Information to other Covered Persons. As discussed above, the Commission has expanded the definition of Covered Persons to include affiliates and employees, to whom disclosing Confidential Information might not be appropriate. Accordingly, the Commission is modifying Section 3(d)(i) to provide that a Covered Person ''may only disclose Confidential Information to other persons who need to receive such information to fulfill their responsibilities to the Plan.'' In addition, disclosure will continue to be permitted to staff of the SEC, as authorized by the Operating Committee, or as otherwise required by law.[100] For the same reasons discussed above with respect to Restricted Information and Highly Confidential Information, the Commission shares commenters' concerns about circumstances in which a Participant's representative may be involved in the development or sale of proprietary data products to a customer base similar to that of SIP customers. If the Participant's representative straddles both roles simultaneously, or provides Confidential Information to other employees of the Participant, the Confidential Information can be used to benefit the Participant's proprietary data business in a manner contrary to the interests of the Plan.

Similarly, the Commission is modifying Section 3(d)(iv), which applies to the sharing of information between a Participant's representative and other employees or agents of the Participant. As proposed, the provision would allow a Participant's representative to disclose Confidential Information (and Highly Confidential Information) ''to other employees or agents of the Participant or its affiliates only as needed for such Covered Person to perform his or her function on behalf of the Participant, as reasonably determined by the Covered Person.''

[91] Advisory Committee Letter, *supra* note 29, at 2.

[92] *Id.*

[93] *Id.*

[94] *Id.*

[95] *Id.*

[96] Charles Schwab Letter, *supra* note 57, at 3. Another comment received in response to the Governance Notice recommended that the confidentiality policy standards should be the same for both the SROs and non-SROs and further suggested that for the non-SRO members to be able to effectively engage with the Operating Committee, they should be able to exercise reasonable discretion in sharing with others within their firm information that may be relevant to policy issues and proposals being considered by the SROs. *See* Letter from John Ramsay, Chief Market Policy Officer, Investors Exchange, LLC, to Vanessa Countryman, Secretary, Commission, dated March 4, 2020 at 6. A separate comment received in response to the Governance Notice thought that the proposed Amendment would improve the handling of confidential information and is designed both to protect confidential information from misuse and to facilitate the sharing of confidential information with the Advisory Committee. *See* Letter from Patrick Sexton, EVP, General Counsel and Corporate Secretary, Cboe Global Markets, Inc., to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 5.

[97] TD Ameritrade Letter, *supra* note 30, at 2.

[98] *Id.* at 3.

[99] The commenter also stated that if disclosure is required by law, the Covered Person should be required to first notify the Operating Committee so as to provide it with an opportunity to redact information or to dispute the requirement to provide it in its entirety. *See id.* at 8. The Commission is not modifying the Amendments to specifically include this requirement, but the Operating Committee could consider this suggestion.

[100] The Commission is making non-substantive wording changes to the last sentence of Section 3(d)(i) to accommodate the revisions to the beginning of that sentence. Specifically, it is separating out the second part of the sentence into a stand-alone sentence that continues to provide that: ''A Covered Person also may disclose Confidential Information to the staff of the SEC, as authorized by the Operating Committee as described below, or as may be otherwise required by law.''

The Commission is striking the phrase ''Participant, as reasonably determined by the Covered Person'' and the phrase ''and Highly Confidential Information'' such that the revised provision will provide that ''A Covered Person that is a representative of a Participant may be authorized by the Operating Committee to disclose particular Confidential Information to other employees or agents of the Participant or its affiliates only in furtherance of the interests of the Plan as needed for such Covered Person to perform his or her function on behalf of the Plan.''

Without this change, the Commission agrees with commenters that the protections in the proposed policy would be insufficient to adequately address circumstances in which a Participant's representative may be involved in the development or sale of proprietary data products to a customer base similar to that of SIP customers. The Commission believes that an exchange's commercial interests in its proprietary data businesses and its potential access to confidential information generated by the Plan and its SIP create potential conflicts of interest, which have the potential to inappropriately influence decisions as to the Plan's operation and thereby impede the Plan's ability to ensure the ''prompt, accurate, reliable, and fair collection, processing, distribution and publication of information with respect to quotations for and transactions in such securities and the fairness and usefulness of the form and content of such information.'' [101] Limiting the disclosure of Confidential Information to situations where the disclosure is reasonably necessary to further the interests of the Plan in the performance of the person's role with the Plan should help mitigate the conflict by protecting against misuse of commercially valuable non-public information.

Further, the Commission is making a change to conform Section 3(d)(iii) to the modifications it made to Section 3(d)(iv) so that both Advisors and Participants' representatives will be subject to the same standard with respect to disclosing Plan-related Confidential Information. As modified, Advisors may be authorized by the Operating Committee to disclose particular Confidential Information ''only in furtherance of the interests of the Plan. . . .'' Advisors will still be required to take any steps requested by the Operating Committee to prevent further dissemination of that Confidential Information. The Commission agrees with commenters that the standard for sharing Confidential Information should be the same for Covered Persons that are representatives of a Participant as well as Advisors, and be limited to situations in which the disclosure is made to further the interests of the Plan. Regardless of the identity of the person in possession of Confidential Information, the Commission believes that information that is labeled as Confidential Information should be protected to the same extent by all Covered Persons. If such information is appropriate to share more broadly, then it should be classified as Public Information. The Commission is therefore modifying the Amendment so that members of the Advisory Committee are treated like Participants' representatives in this regard.

4. Unauthorized Disclosures

In the Notice, the Commission solicited comment on remedies for disclosures inconsistent with the proposed policy. As proposed, the policy provides that unauthorized disclosures of Highly Confidential Information, as determined by the Operating Committee acting by majority vote, will be subject to an ''appropriate remedy'' that could include a letter of complaint against a Participant's representative, or the removal of an Advisor from the Advisory Committee.[102] With respect to Confidential Information, the policy provides that unauthorized disclosure will be self-reported to the Chair of the Operating Committee and disclosed in the minutes. The Commission asked, among other things, whether these proposed remedies are sufficient to deter unauthorized disclosure, or whether any other consequences of such disclosure should be provided.[103] The Commission also asked whether commenters believe that ''appropriate remedies for Participants and Advisors should differ, or should potential remedies for Participants that disclose confidential information also include the possibility of removal of that Participant from the Operating Committee.'' [104]

In response, one commenter stated that ''[r]emedies for unauthorized disclosure of any confidential information, regardless of classification, should be the same irrespective of the nature of the Covered Person'' and that ''breaches by a Covered Person should be disclosed to the Operating Committee, recorded, and reviewed by the Operating Committee for determination upon majority vote of an appropriate remedy, which should include remedies up to and including: Required recusal of future discussions of related confidential topics, or removal from any role with respect to Plan Activities.'' [105] According to the commenter, ''[a]ny reviews of votes regarding a breach should require recusal of such Covered Person who caused the breach.'' [106] Another commenter believes that a Participant representative should be removed from the Operating Committee if she is in violation of the Confidentiality Policy, just as an Advisory Committee member can be removed as described in the Amendment.[107]

After considering the comments received in response to the Notice, the Commission believes that it is appropriate to modify Section 3(d)(vi) to specifically provide a process for a Covered Persons to report potential unauthorized disclosures to the Chair of the Operating Committee so that the Amendment does not rely solely on self-reporting of unauthorized disclosures. Specifically, the Commission is adding the following new sentence to the beginning of Section 3(d)(vi): ''A person that has reason to believe that Confidential Information has been disclosed by another without the authorization of the Operating Committee or otherwise in a manner inconsistent with this Policy may report such potential unauthorized disclosure to the Chair of the Operating Committee.'' [108] The Participants in their submission state that the proposal addresses unauthorized disclosure insofar as a Covered Person who discloses Confidential Information without the authorization of the Operating Committee would be obligated to self-report such disclosure to the Chair of the Operating Committee, which would then be recorded in the minutes of the Operating Committee.[109] The Commission believes that relying on self-reporting is insufficient. Rather,

[101] 15 U.S.C. 78k–1(c)(1)(B).

[102] *See* Section 3(c)(ii).

[103] *See* Notice, *supra* note 6, 85 FR at 2218.

[104] *Id.*

[105] TD Ameritrade Letter, *supra* note 30, at 10 (internal quotation marks omitted).

[106] *Id.*

[107] *See* Charles Schwab Letter, *supra* note 57, at 3. The Commission is not modifying the Amendment to remove a Participant from the Operating Committee in the manner suggested by the commenter. The Participants, as SROs, have legal obligations and responsibilities under the Act, including with regard to operating the Plan. *See* 15 U.S.C. 78k–1(a)(3)(B). Requiring their removal from the Operating Committee would impede their ability to fulfil their statutory requirements.

[108] In light of the new first sentence, the Commission is making a conforming change to the second sentence of Section 3(d)(vi) to begin with the phrase ''In addition.''

[109] *See* Notice, *supra* note 6, 85 FR at 2215.

the Commission believes that providing a formal mechanism for any Covered Person as well as others to report potential unauthorized disclosures will assure such individuals that they can bring such instances to the attention of the leadership of the Operating Committee.[110] This modification is intended to make clear that persons who have reason to believe that Confidential Information has been disclosed by another without the authorization of the Operating Committee or otherwise in a manner inconsistent with this Policy may report such potential unauthorized disclosure to the Chair of the Operating Committee. Thus, the Commission believes that this modification will promote compliance with persons tasked with protecting the confidentiality of Plan-related information and, to the extent it results in unauthorized disclosures being found and disclosed in the minutes, it will provide transparency into overall compliance with the policy.

IV. Commission Findings

For the reasons discussed throughout, the Commission finds that the proposed Amendment to the Plan, as modified by the Commission, is consistent with the requirements of the Act and the rules and regulations thereunder, and in particular, Section 11A of the Act[111] and Rule 608[112] thereunder in that it is necessary or appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanisms of, a national market system.

Section 11A of the Act[113] sets forth Congress' finding that it is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to ensure the prompt, accurate, reliable and fair collection, processing, distribution, and publication of information with respect to quotations for and transactions in such securities and the fairness and usefulness of the form and content of such information. The Commission believes that the confidentiality policy, as modified, furthers these goals set forth by Congress.

V. Conclusion

It is therefore ordered, pursuant to Section 11A of the Act,[114] and the rules thereunder, that the proposed Amendment to the Nasdaq/UTP Plan (File No. S7–24–89), as modified by the Commission, is approved.

By the Commission.

J. Matthew DeLesDernier,

Assistant Secretary.

Exhibit A

Marked To Show Changes From the Proposal

The Commission's additions are *italicized;* deletions are [bracketed].

UTP Confidentiality Policy

1. Purpose and Scope

a. The purpose of this Confidentiality Policy (the ''Policy'') is to provide guidance to the Operating and Advisory Committees of the UTP Plan (the ''Plan''), and all Subcommittees thereof, regarding the confidentiality of any data or information (in physical or electronic form) generated, accessed or transmitted to the Operating Committee, as well as discussions occurring at a meeting of the Operating Committee or any Subcommittee.

b. This Policy applies to all representatives of the Participants, Pending Participants, and the UTP Administrator and Processor (''Administrator and Processor''); *affiliates, employees, and* agents of the Operating Committee, *a Participant, a Pending Participant, the Administrator, and the Processor,* including, but not limited to, attorneys, *auditors,* advisors, accountants, contractors or subcontractors (''Agents''); any third parties invited to attend meetings of the Operating Committee or Plan subcommittees; and all members of the Advisory Committee *and their employers* (collectively, ''Covered Persons''). Covered Persons do not include staff of the Securities and Exchange Commission (''SEC''). All Covered Persons must adhere to the principles set out in this Policy *and all Covered Persons that are natural persons may not receive Plan data and information until they affirm in writing that they have read this Policy and undertake to abide by its terms.*

c. *Covered Persons* [The Administrator and Processor]may not disclose Restricted, Highly Confidential, or Confidential information except as consistent with this Policy and directed by the Operating Committee.

d. The Administrator and Processor will establish written confidential information policies that provide for the protection of information under their control *and the control of their Agents, including policies and procedures that provide systemic controls for classifying, declassifying, redacting, aggregating, anonymizing, and safeguarding information,* that is in addition to, and not less than, the protection afforded herein. Such policies will be *reviewed and approved by the Operating Committee, publicly posted, and* made available to the Operating Committee for review *and approval* every two years *thereafter* or when changes are made, whichever is sooner.

e. Information will be classified solely based on its content.

2. Definitions

a. ''Restricted Information'' is highly sensitive customer-specific financial information, customer-specific audit information, other customer financial information, and Personal Identifiable Information (''PII'').

b. ''Highly Confidential Information'' is[: (i) any data or information shared in an Executive Session or that would otherwise qualify for confidential treatment pursuant to the Plan's Executive Session Policy; and (ii)]any [other]highly sensitive Participant-specific, customer-specific, individual-specific, or otherwise sensitive information relating to the Operating Committee, Participants, or customers that is not otherwise Restricted Information. Highly Confidential Information includes: A Participant's contract negotiations with the Processor or Administrator; personnel matters; information concerning the intellectual property of Participants or customers; and any document subject to the Attorney-Client Privilege or Work Product Doctrine.

c. ''Confidential Information'' is, *except to the extent covered by (a), (b), or (d):* (i) any non-public data or information designated as Confidential by a majority vote of the Operating Committee; (ii) any document generated by a Participant or Advisor and designated by that Participant or Advisor as Confidential; *and* (iii) [the minutes of the Operating Committee or any subcommittee thereof unless approved by the Operating Committee for release to the public; and (iv)]the individual views and statements of

[110] This new provision supplements the proposed provisions that require self-reporting by a Covered Person in breach of the policy and the recording of such breaches in the minutes of the Operating Committee, neither of which the Commission is modifying. The Commission is modifying Section 3(d)(vi) to add the words ''self-reported'' to make it clear that the proposed provisions that require the name of the self-reporting Participant to be identified in the minutes do not apply to the Commission's modification that lets any person report such potential unauthorized disclosure to the Chair of the Operating Committee. The Operating Committee may, at its discretion, choose to put in place an appropriate process to review such reports of potential unauthorized disclosures.

[111] 15 U.S.C. 78k–1.

[112] 17 CFR 240.608.

[113] 15 U.S.C. 78k–1(c)(1)(B).

[114] 15 U.S.C. 78k–1.

Covered Persons and SEC staff disclosed during a meeting of the Operating Committee or any subcommittees thereunder.

d. ''Public Information'' is: (i) any information that is not either Restricted Information or Highly Confidential Information or that has not been designated as Confidential Information; (ii) any confidential information that has been approved by the Operating Committee for release to the public; [or](iii) *the duly approved minutes of the Operating Committee and any subcommittee thereof with detail sufficient to inform the public on matters under discussion and the views expressed thereon (without attribution); (iv) Plan subscriber and performance metrics; (v) Processor transmission metrics; and (vi)* any information that is otherwise publicly available*, except for information made public as a result of a violation of this Policy or any applicable law or regulation.* Public Information includes, but is not limited to, any topic discussed during a meeting of the Operating Committee, an outcome of a topic discussed, or a Final Decision of the Operating Committee, as defined below.

e. A ''Final Decision of the Operating Committee'' is an action or inaction of the Operating Committee as a result of the vote of the Operating Committee, but will not include the individual votes of a Participant.

f. The ''Operating Committee'' consists of the Participants, Pending Participants, Administrator and Processor, and designated Agents.

g. An ''Executive Session'' of the Operating Committee consists of the Participants, Administrator and Processor and designated Agents.

h. The ''Advisory Committee'' consists of any individual selected by the Operating Committee or a Plan Participant as an advisor to the Operating Committee.

i. The ''Legal Subcommittee'' of the Operating Committee consists of the Participants, Administrator and Processor and Legal Counsel.

3. Procedures

a. General

i. The Administrator and Processor will be the custodians of all documents discussed by the Operating Committee and will be responsible for maintaining the classification of such documents pursuant to this Policy.

ii. The Administrator may, under delegated authority, designate documents as Restricted, Highly Confidential, or Confidential, which will be determinative unless altered by a majority vote of the Operating Committee.

iii. *The* Administrator will ensure that all Restricted, Highly Confidential, or Confidential documents are properly labeled *and, if applicable, electronically safeguarded.*

iv. All contracts between the Operating Committee and its Agents shall require Operating Committee information to be treated as Confidential Information that may not be disclosed to third parties, except as necessary to effect the terms of the contract or as required by law, and shall incorporate the terms of this Policy, or terms that are substantially equivalent or more restrictive, into the contract.

b. Procedures Concerning Restricted Information

i. *Except as provided below, Covered Persons in possession of Restricted Information are prohibited from disclosing it to others, including Agents. This prohibition does not apply to disclosures to the staff of the SEC or as otherwise required by law, or to other Covered Persons as expressly provided for by this Policy.* Restricted Information will be kept in confidence by the Administrator and Processor and will not be disclosed to the Operating Committee or any subcommittee thereof, or during Executive Session, or the Advisory Committee, except as follows:

1. If the Administrator determines that it is appropriate to share a customer's financial information with the Operating Committee or a subcommittee thereof, the Administrator will first anonymize the information by redacting the customer's name and any other information that may lead to the identification of the customer.

2. The Administrator may disclose the identity of a customer that is the subject of Restricted Information in Executive Session only if the Administrator determines in good faith that it is necessary to disclose the customer's identity in order to obtain input or feedback from the Operating Committee or a subcommittee thereof about a matter of importance to the Plan. In such an event, the Administrator will change the designation of the information at issue from ''Restricted Information'' to ''Highly Confidential Information,'' and its use will be governed by the procedures for Highly Confidential Information in paragraph (c) below.

3. The Administrator may share Restricted Information related to any willful, reckless or grossly negligent conduct by a customer discovered by the Administrator with the UTP Administrator or with the *staff of the* SEC, as appropriate, upon majority vote of the Operating Committee in Executive Session, provided that, in any report by the Administrator during Executive Session related to such disclosure, the Administrator anonymizes the information related to the wrongdoing by removing the names of the party or parties involved, as well as any other information that may lead to the identification of such party or parties.

c. Procedures Concerning Highly Confidential Information

i. Disclosure of Highly Confidential Information:

1. *Except as provided below, Covered Persons in possession of Highly Confidential Information are prohibited from disclosing it to others, including Agents. This prohibition does not apply to disclosures to the staff of the SEC or as otherwise required by law, or to other Covered Persons authorized to receive it.* Highly Confidential Information may be disclosed only in Executive Session of the Operating Committee or to the Legal Subcommittee.

2. Highly Confidential Information may be disclosed to the staff of the SEC, unless it is protected by the Attorney-Client Privilege or the Work Product Doctrine. Any disclosure of Highly Confidential Information to the staff of the SEC will be accompanied by a FOIA Confidential Treatment request.

3. Apart from the foregoing, the Operating Committee has no power to authorize any other disclosure of Highly Confidential Information.

ii. In the event that a Covered Person is determined by a majority vote of the Operating Committee to have disclosed Highly Confidential Information, the Operating Committee will determine the appropriate remedy for the breach based on the facts and circumstances of the event. For the representatives of a Participant, remedies include a letter of complaint submitted to the SEC, which may be made public by the Operating Committee. For a member of the Advisory Committee, remedies include removal of that member from the Advisory Committee.

d. Procedures Concerning Confidential Information

i. Confidential Information may be disclosed to the Operating Committee, any subcommittee thereof, and the Advisory Committee. A Covered Person *may only disclose Confidential Information to other persons who need to receive such information to fulfill their responsibilities to the Plan. A Covered Person also may disclose Confidential Information to* [will not disclose Confidential Information to any individual that is not either a Covered

Person or a member of]the staff of the SEC, [except]*as authorized by* [with authorization of]the Operating Committee as described below, or as may be otherwise required by law.

ii. The Operating Committee or a subcommittee thereof may authorize the disclosure of Confidential Information by an affirmative vote of the number of members that represent a majority of the total number of members of the Operating Committee or subcommittee. Notwithstanding the foregoing, the Operating Committee will not authorize the disclosure of Confidential Information that is generated by a Participant or Advisor and designated by that Participant or Advisor as Confidential, unless such Participant or Advisor consents to the disclosure.

iii. Members of the Advisory Committee may be authorized by the Operating Committee to disclose particular Confidential Information *only in furtherance of the interests of the Plan,* to enable them to consult with industry representatives or technical experts, provided that the Member of the Advisory Committee takes any steps requested by the Operating Committee to prevent further dissemination of that Confidential Information, including providing the individual(s) consulted with a copy of this policy and requesting that person to maintain the confidentiality of such information in a manner consistent with this policy.

iv. A Covered Person that is a representative of a Participant may *be authorized by the Operating Committee to* disclose *particular* Confidential Information [and Highly Confidential Information]to other employees or agents of the Participant or its affiliates only *in furtherance of the interests of the Plan* as needed for such Covered Person to perform his or her function on behalf of the *Plan*[Participant, as reasonably determined by the Covered Person]. A copy of this policy will be made available to recipients of such information who are employees or agents of a Participant or its affiliates that are not Covered Persons, who will be required to abide by this policy.

v. A Covered Person may disclose their own individual views and statements that may otherwise be considered Confidential Information without obtaining authorization of the Operating Committee, provided that in so disclosing, the Covered Person is not disclosing the views or statements of any other Covered Person or Participant that are considered Confidential Information.

vi. *A person that has reason to believe that Confidential Information has been disclosed by another without the authorization of the Operating Committee or otherwise in a manner inconsistent with this Policy may report such potential unauthorized disclosure to the Chair of the Operating Committee. In addition, a* [A]Covered Person that discloses Confidential Information without the authorization of the Operating Committee will report such disclosure to the Chair of the Operating Committee. Such *self-reported* unauthorized disclosure of Confidential Information will be recorded in the minutes of the meeting of the Operating Committee and will contain: (a) The name(s) of the person(s) who disclosed such Confidential Information, and (b) a description of the Confidential Information disclosed. The name(s) of the person(s) who disclosed such Confidential Information will also be recorded in any publicly available summaries of Operating Committee minutes.

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88828; File No. SR–MSRB–2020–02]

Self-Regulatory Organizations; Municipal Securities Rulemaking Board; Notice of Filing of a Proposed Rule Change To Align Certain MSRB Rules to Securities Exchange Act Rule 15l–1, Regulation Best Interest

May 6, 2020.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'' or ''Exchange Act'') [1] and Rule 19b–4 thereunder,[2] notice is hereby given that on May 1, 2020, the Municipal Securities Rulemaking Board (''MSRB'') filed with the Securities and Exchange Commission (''SEC'' or ''Commission'') the proposed rule change as described in Items I, II, and III below, which Items have been prepared by the MSRB. 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 MSRB filed with the Commission a proposed rule change consisting of amendments to MSRB Rule G–8, on books and records, MSRB Rule G–9, on preservation of records, MSRB Rule G–19, on suitability of recommendations and transactions, MSRB Rule G–20, on gifts, gratuities, non-cash compensation and expenses of issuance, MSRB Rule G–48, on transactions with Sophisticated Municipal Market Professionals (''SMMPs''), and the deletion of an interpretation of MSRB Rule G–20 (the ''proposed rule change''). The proposed rule change would align MSRB rules to the Commission's recently adopted Rule 15l–1 under the Exchange Act (''Regulation Best Interest'').[3]

The proposed rule change would result in the following changes to MSRB rules:

- MSRB Rule G–19 would apply only in circumstances in which Regulation Best Interest does not apply;
- MSRB Rule G–48 would make clear that the exception from the requirement to perform a customer-specific suitability analysis when making a recommendation to an SMMP, as defined in MSRB Rule D–15, is available only for recommendations that are subject to MSRB Rule G–19;
- MSRB Rule G–20 would require any permissible non-cash compensation to align with the requirements of Regulation Best Interest; and
- Dealers would be required to maintain books and records required by Regulation Best Interest and the related SEC Form CRS requirement.

The effective date of all of the amendments to MSRB rules included in the proposed rule change will be the compliance date for Regulation Best Interest.[4] Dealers would not have an obligation to comply with the proposed rule change until the effective date and the current versions of MSRB Rules G–8, G–9, G–19, G–20, and G–48 would remain applicable in the interim period between SEC approval and the effective date.

The text of the proposed rule change is available on the MSRB's website at *www.msrb.org/Rules-and-Interpretations/SEC-Filings/2020-Filings.aspx,* at the MSRB'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 MSRB included statements concerning the purpose of and basis for the proposed rule change and discussed any

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] 17 CFR 240.15l–1; *see also* Exchange Act Release No. 86031 (June 5, 2019), 84 FR 33318 (July 12, 2019) (File No. S7–07–18) (''Regulation Best Interest Adopting Release'').

[4] *See* Regulation Best Interest Adopting Release, 84 FR 33400 (setting June 30, 2020 as the compliance date for Regulation Best Interest).

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 MSRB 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

Background

On June 5, 2019, the SEC adopted Regulation Best Interest, which establishes a new standard of conduct for broker-dealers [5] and natural persons who are associated persons of a broker-dealer (collectively, ''broker-dealers'') when they make a recommendation to a retail customer, defined generally as a natural person or the legal representative of such person, who receives and uses a recommendation from a broker-dealer primarily for personal, family, or household purposes, of any securities transaction or investment strategy involving securities. The Commission stated that Regulation Best Interest enhances the broker-dealer standard of conduct beyond existing suitability obligations, and aligns the standard of conduct with retail customers' reasonable expectations by imposing certain new requirements on broker-dealers.[6] Specifically, Regulation Best Interest imposes the following ''general obligation'':

A broker, dealer, or a natural person who is an associated person of a broker or dealer, when making a recommendation of any securities transaction or investment strategy involving securities (including account recommendations) to a retail customer, shall act in the best interest of the retail customer at the time the recommendation is made, without placing the financial or other interest of the broker, dealer, or natural person who is an associated person of a broker or dealer making the recommendation ahead of the interest of the retail customer.[7]

Regulation Best Interest provides that this general obligation is satisfied only if a broker-dealer complies with four component obligations: (i) An obligation to make certain prescribed disclosures, before or at the time of the recommendation, about the recommendation and the relationship between the retail customer and the broker-dealer (the ''Disclosure Obligation''); [8] (ii) an obligation to exercise reasonable diligence, care, and skill in making a recommendation (the ''Care Obligation''); [9] (iii) an obligation to establish, maintain, and enforce written policies and procedures reasonably designed to address conflicts of interest (the ''Conflict of Interest Obligation''); [10] and (iv) an obligation to establish, maintain, and enforce written policies and procedures reasonably designed to achieve compliance with Regulation Best Interest (the ''Compliance Obligation'').[11]

The MSRB has reviewed its rule book in light of the Commission's adoption of Regulation Best Interest and the related Form CRS requirement [12] and, as further discussed below, is filing the proposed rule change to harmonize the MSRB's rules with the Commission's Regulation Best Interest and Form CRS and reduce the potential for conflicting or duplicative regulation in the municipal securities market.[13] The MSRB has coordinated the proposed amendments with FINRA, which has proposed similar amendments to its rules,[14] in order to harmonize requirements, to the extent possible, for dealers that are subject to the rules of both the MSRB and FINRA.

I. Suitability

A. MSRB Rule G–19

MSRB Rule G–19 provides that a dealer must have a reasonable basis to believe that a recommended transaction or investment strategy involving municipal securities is suitable for the customer, based on the information obtained through the reasonable diligence of the dealer to ascertain the customer's investment profile.[15] MSRB Rule G–19 is composed of three component obligations:

- *Reasonable-basis suitability,* which requires a dealer to have a reasonable basis to believe, based on reasonable diligence, that the recommendation is suitable for at least some investors; [16]
- *Customer-specific suitability,* which requires a dealer to have a reasonable basis to believe that the recommendation is suitable for a particular customer based on that customer's investment profile; [17] and
- *Quantitative suitability,* which requires a dealer who has actual or *de facto* control over a customer account to have a reasonable basis for believing that a series of recommended transactions, even if suitable when viewed in isolation, are not excessive and unsuitable for the customer when taken together in light of the customer's investment profile.[18]

MSRB Rule G–19 applies to all dealers when making a recommendation to a ''customer,'' which is defined in MSRB Rule D–9 as any person other than a dealer acting in its capacity as a dealer or an issuer in transactions involving the sale of a new issue of its securities.[19] When a dealer reasonably concludes that a customer is an SMMP,[20] however, the dealer is not

[5] To effect transactions in municipal securities, a dealer must be registered with the Commission as either a broker-dealer under Section 15(b)(1) or a municipal securities dealer under Section 15B(a)(2) of the Exchange Act. All dealers, other than bank dealers, are broker-dealers and therefore are subject to Regulation Best Interest. MSRB Rule D–8 defines a bank dealer as ''a municipal securities dealer which is a bank or a separately identifiable department or division of a bank.'' These dealers are registered with the Commission under Exchange Section 15B(a)(2) and thus are not subject to Regulation Best Interest. Because bank dealers can make recommendations of municipal securities transactions or investment strategies involving municipal securities to retail customers, the Board plans to issue a separate Request for Comment on whether the Board will apply the requirements of Regulation Best Interest, through further amendments to MSRB rules, to bank dealers.

[6] Regulation Best Interest Adopting Release, 84 FR 33319.

[7] 17 CFR 240.15l–1(a)(1).

[8] 17 CFR 240.15l–1(a)(2)(i).

[9] 17 CFR 240.15l–1(a)(2)(ii).

[10] 17 CFR 240.15l–1(a)(2)(iii).

[11] 17 CFR 240.15l–1(a)(2)(iv).

[12] When it adopted Regulation Best Interest, the Commission also adopted a requirement for registered investment advisers and registered broker-dealers to provide retail investors with a relationship summary on new Form CRS, including information about the ''types of client and customer relationships and services the firm offers; the fees, costs, conflicts of interest, and required standard of conduct associated with those relationships and services; whether the firm and its financial professionals currently have reportable legal or disciplinary history; and how to obtain additional information about the firm.'' Exchange Act Release No. 86032 (June 5, 2019), 84 FR 33492 (July 12, 2019).

[13] SEC staff frequently asked questions on Regulation Best Interest are available at: *https://www.sec.gov/tm/faq-regulation-best-interest.*

[14] *See* Exchange Act Release No. 88422, File No. SR–FINRA–2020–007 (March 19, 2020), 85 FR 16974 (March 25, 2020).

[15] MSRB Rule G–19 defines a customer's investment profile to include the customer's age, other investments, financial situation and needs, tax status, investment objectives, investment experience, investment time horizon, liquidity needs, risk tolerance, and any other information the customer may disclose to the dealer in connection with such recommendation.

[16] MSRB Rule G–19, Supplementary Material .05(a).

[17] MSRB Rule G–19, Supplementary Material .05(b).

[18] MSRB Rule G–19(c).

[19] MSRB Rule D–9 states that, ''Except as otherwise specifically provided by rule of the Board, the term 'customer' shall mean any person other than a broker, dealer, or municipal securities dealer acting in its capacity as such or an issuer in transactions involving the sale by the issuer of a new issue of its securities.''

[20] MSRB Rule D–15 defines a customer as an SMMP according to three elements:

(a) *Nature of the Customer.* The customer must be:

(1) a bank, savings and loan association, insurance company, or registered investment company;

Continued

obligated to perform a customer-specific suitability analysis under MSRB Rule G–19.[21]

Conceptually similar to MSRB Rule G–19, the Care Obligation of Regulation Best Interest also requires a three-part analysis to evaluate recommendations to retail customers but employs the higher best interest standard instead of MSRB Rule G–19's suitability standard. In addition, while Regulation Best Interest applies only to recommendations to ''retail customers,'' defined generally as a natural person or the legal representative of such person, who receives and uses a recommendation from a broker-dealer primarily for personal, family, or household purposes,[22] MSRB Rule G–19 applies to ''customers'' (with an exception to the customer-specific suitability requirement for recommendations to SMMPs).

The proposed rule change includes two amendments to MSRB Rule G–19 designed to harmonize MSRB requirements with Regulation Best Interest. First, to avoid unnecessary regulatory complexity, the applicability of MSRB Rule G–19 would be limited only to circumstances in which Regulation Best Interest does not apply. Second, to conform the quantitative suitability component of MSRB Rule G–19, for circumstances in which MSRB Rule G–19 applies, to the analogous requirement in Regulation Best Interest, the proposed rule change would remove the limitation that requires a quantitative suitability determination only when a dealer has ''actual or *de facto* control'' over the customer's account. These proposed amendments are discussed below.

i. Eliminate Applicability of MSRB Rule G–19 to Recommendations Subject to Regulation Best Interest

As noted above, Regulation Best Interest addresses generally the same conduct that is addressed by MSRB Rule G–19 but employs a best interest, rather than a suitability, standard. Absent action by the Board, a dealer would be required to reconcile compliance with both Regulation Best Interest and MSRB Rule G–19 in many circumstances. In such circumstances, the MSRB believes that compliance with Regulation Best Interest would result in compliance with MSRB Rule G–19 because a dealer who ''act[s] in the best interest of the retail customer'' [23] when making a recommendation to a retail customer of any securities transaction or investment strategy involving securities would necessarily also meet the MSRB Rule G–19 requirement to ''have a reasonable basis to believe that [the recommendation] is suitable for the customer.'' Accordingly, in order to reduce the potential for duplicative regulation and unnecessary complexity, the Board is proposing to limit the application of MSRB Rule G–19 to circumstances in which Regulation Best Interest does not apply. To do so, the Board would add new text to MSRB Rule G–19 that states that MSRB Rule G–19 does not apply to recommendations subject to Regulation Best Interest. MSRB Rule G–19 would thus apply only to:

- Recommendations to customers that are not ''retail customers,'' as defined by Regulation Best Interest, and
- Recommendations to any customers by bank dealers.[24]

Regulation Best Interest defines a retail customer as a natural person, or the legal representative of such natural person (regardless of net worth), who receives a recommendation from a broker-dealer and uses that recommendation primarily for personal, family, or household purposes. Accordingly, if the dealer making a recommendation is subject to Regulation Best Interest, MSRB Rule G–19 would not apply when the dealer makes a recommendation to such persons. The Board believes this approach will provide regulatory clarity about the applicability and requirements of MSRB Rule G–19 and Regulation Best Interest to market participants in an effective and efficient manner.

ii. Align MSRB Rule G–19's Quantitative Suitability Obligation to the Requirements of Regulation Best Interest

Currently, MSRB Rule G–19's quantitative suitability obligation requires a dealer to have a reasonable basis for believing that a series of recommended transactions are not excessive and unsuitable for the customer when taken together in light of the customer's profile, but only if the dealer has actual or *de facto* control over the customer's account.[25] In contrast, the quantitative care obligation of Regulation Best Interest applies regardless of whether the broker-dealer exercises actual or *de facto* control over the customer's account.[26] In the Regulation Best Interest Adopting Release, the Commission stated:

[I]mposing the quantitative care obligation without a ''control'' element would provide consistency in the investor protections provided to retail customers by requiring a broker-dealer to always form a reasonable basis as to the recommended frequency of trading in a retail customer's account—irrespective of whether the broker-dealer ''controls'' or exercises ''de facto control'' over the retail customer's account. This would also be consistent with the other obligations of the Care Obligation, which apply regardless of whether a broker-dealer ''controls'' or exercises ''de facto control'' over the retail customers' account.[27]

For the same reasons, the proposed rule change eliminates the control element of the quantitative suitability obligation prescribed in Supplementary Material .05(c) of MSRB Rule G–19.

B. MSRB Rule G–48

As described above, MSRB Rule G–48(c) provides that a dealer making a municipal securities recommendation to an SMMP does not have any obligation under MSRB Rule G–19 to perform a customer-specific suitability analysis. An SMMP is defined by three components:

- The customer must fit within a prescribed category of institutional investor or be a natural person or entity

(2) an investment adviser registered either with the Commission under Section 203 of the Investment Advisers Act of 1940 or with a state securities commission (or any agency or office performing like functions); or

(3) any other person or entity with total assets of at least $50 million.

(b) *Dealer Determination of Customer Sophistication.* The dealer must have a reasonable basis to believe that the customer is capable of evaluating investment risks and market value independently, both in general and with regard to particular transactions and investment strategies in municipal securities.

(c) *Customer Affirmation.* The customer must affirmatively indicate that it:

(1) is exercising independent judgment in evaluating:

(A) the recommendations of the dealer;

(B) the quality of execution of the customer's transactions by the dealer; and

(C) the transaction price for non-recommended secondary market agency transactions as to which (i) the dealer's services have been explicitly limited to providing anonymity, communication, order matching and/or clearance functions and (ii) the dealer does not exercise discretion as to how or when the transactions are executed; and

(2) has timely access to material information that is available publicly through established industry sources as defined in Rule G–47(b)(i) and (ii).

[21] MSRB Rule G–48(c).

[22] *See* 17 CFR 240.15l–1(b)(1).

[23] 17 CFR 240.15l–1(a)(1).

[24] As noted above, the MSRB plans to issue a Request for Comment on whether the MSRB will apply the requirements of Regulation Best Interest to bank dealers through further amendments to MSRB rules.

[25] MSRB Rule G–19, Supplementary Material .05(c).

[26] *See* 17 CFR 240.15l–1(a)(2)(ii)(C); *see also* Regulation Best Interest Adopting Release, 84 FR at 33327.

[27] Regulation Best Interest Adopting Release, 84 FR at 33384 (citation omitted).

with total assets of at least $50 million;[28]

• The dealer must have a reasonable basis to believe that the customer is capable of evaluating investment risks and market value independently;[29] and

• The customer must make certain affirmations regarding the exercise of independent judgment and access to information.[30]

As a result of this definition, a dealer making a recommendation to a natural person with at least $50 million in assets and who otherwise meets the definition of SMMP, would be required by MSRB Rule G–19 to conduct reasonable basis and quantitative suitability analyses but not a customer-specific suitability analysis.

In contrast, Regulation Best Interest applies when a broker-dealer makes a recommendation to a ''retail customer.'' A ''retail customer'' is a natural person or the legal representative of such natural person (regardless of net worth) who receives a recommendation from a broker-dealer and uses that recommendation primarily for personal, family, or household purposes.[31] Whenever Regulation Best Interest applies, it applies in full; there is no exception from the customer-specific care obligation for high-net worth individuals.

As described above, under the proposed amendments to MSRB Rule G–19, MSRB Rule G–19 would not apply to recommendations subject to Regulation Best Interest. Accordingly, the proposed rule change includes an amendment to MSRB Rule G–48(c) stating that the exception from the customer-specific suitability requirement is available only when a recommendation is subject to MSRB Rule G–19 and not Regulation Best Interest.

II. Non-Cash Compensation

MSRB Rule G–20(g) broadly prohibits dealers and their associated persons from directly or indirectly accepting or making payments or offers of payments of any non-cash compensation in connection with the sale and distribution of a primary offering of municipal securities, subject to certain limited exceptions. Described generally, these exceptions are:

• Gifts that do not exceed $100 per individual per year and are not preconditioned on achievement of a sales target;[32]

• Occasional gifts of meals or tickets to theatrical, sporting, and other entertainments, provided that such gifts are not so frequent or so extensive as to raise any question of propriety and are not preconditioned on achievement of a sales target;[33]

• Payment or reimbursement by offerors (generally, the issuer and any advisors to the issuer, the underwriters, and their affiliates) in connection with training or education meetings, subject to specified conditions, including that the payment is not conditioned on achieving a sales target;[34]

• Internal non-cash compensation arrangements between the dealer and its associated persons, subject to specified conditions including that any non-cash compensation related to a sales contest must be based on the total production of all associated persons with respect to all municipal securities within respective product types distributed by the dealer and credit for those sales must be weighted equally;[35] and

• Contributions by any person other than the dealer to a non-cash compensation arrangement between a dealer and its associated persons, subject to the same conditions for permissible internal non-cash compensation arrangements, described above.[36]

Regulation Best Interest's Conflict of Interest Obligation requires broker-dealers to establish, maintain and enforce written policies and procedures reasonably designed to, among other things, identify and eliminate sales contests, sales quotas, bonuses, and non-cash compensation that are based on the sale of specific securities or specific types of securities within a limited period of time.[37] As described above, MSRB Rule G–20 permits certain sales contests in connection with primary offerings. Accordingly, the MSRB is proposing to clarify in MSRB Rule G–20(g) that any non-cash compensation permitted by MSRB Rule G–20(g), including any sales contests, must also be consistent with the applicable requirements of Regulation Best Interest.

Additionally, in June 1982, the MSRB published interpretive guidance under MSRB Rule G–20 stating that sales contests offered by an underwriter to participating members of a syndicate constitute compensation for services and, therefore, must meet the requirements of the then-current version of MSRB Rule G–20.[38] The MSRB proposes to delete this interpretation from 1982 because, with respect to dealers that make recommendations to retail customers, such sales contests may be inconsistent, depending on the particular facts and circumstances, with the requirements of Regulation Best Interest's Conflict of Interest Obligation, which requires broker-dealers to establish, maintain and enforce written policies and procedures reasonably designed to ''[i]dentify and eliminate any sales contests, sales quotas, bonuses, and non-cash compensation that are based on the sales of specific securities or specific types of securities within a limited period of time.''[39] In adopting Regulation Best Interest, the Commission stated that ''[s]ales contests, sales quotas, bonuses and non-cash compensation that are based on the sales of specific securities within a limited period of time create high-pressure situations for associated persons to increase the sales of specific securities or specific types of securities within a limited period of time and thus compromise the best interests of their retail customers.''[40] The MSRB believes the same policy concerns apply with respect to non-retail customers. Specifically, the high-pressure sales situations described above have the potential to compromise the best interests of non-retail customers as well. Accordingly, the Board is proposing to delete this interpretation.

III. Books and Records

A. MSRB Rule G–8

MSRB Rule G–8 directs dealers to make and keep current specified books and records to the extent they are applicable to a dealer's business. For

[28] MSRB Rule D–15(a).

[29] MSRB Rule D–15(b).

[30] MSRB Rule D–15(c).

[31] 17 CFR 240.15l–1(b)(1).

[32] MSRB Rule G–20(d)(i).

[33] MSRB Rule G–20(d)(ii).

[34] MSRB Rule G–20(d)(iii).

[35] MSRB Rule G–20(d)(iv).

[36] MSRB Rule G–20(d)(v).

[37] 17 CFR 240.15l–1(a)(2)(iii)(D). The Conflict of Interest Obligation also requires broker-dealers to (1) identify and at a minimum disclose or eliminate all conflicts of interest associated with a recommendation of any securities transaction or investment strategy involving securities to a retail customer; (2) identify and mitigate any conflicts of interest associated with such recommendations that create an incentive for a natural person who is an associated person of a broker-dealer to place the interest of the broker-dealer or such natural person ahead of the interest of the retail customer; and (3) identify and disclose any material limitations placed on the securities or investment strategies involving securities that may be recommended to a retail customer and any conflicts of interest associated with such limitations and prevent such limitations and associated conflicts of interest from causing the broker-dealer, or a natural person who is an associated person of the broker-dealer, to make recommendations that place the interest of the broker-dealer or such natural person ahead of the interest of the retail customer. 17 CFR 240.15l–1(a)(3)(A)–(C).

[38] *See* Rule G–20 Interpretive Guidance, ''Authorization of Sales Contests'' (June 25, 1982).

[39] *See* 17 CFR 240.15l–1(a)(2)(iii).

[40] Regulation Best Interest Adopting Release, 84 FR at 33331.

dealers subject to Exchange Act Rule 17a–3, MSRB Rule G–8(f) provides that compliance with Exchange Act Rule 17a–3 under the Act will be deemed compliance with MSRB Rule G–8, provided that certain records required by MSRB Rule G–8 must be maintained in any event. Exchange Act Rule 17a–3 requires broker-dealers to make and keep current specified books and records and provides that for purposes of transactions in municipal securities by dealers, compliance with MSRB Rule G–8 will be deemed compliance with Exchange Act Rule 17a–3.[41]

When the Commission adopted Regulation Best Interest, it amended Exchange Act Rule 17a–3 to require broker-dealers to maintain a record of all information collected from and provided to a retail customer pursuant to Regulation Best Interest, along with the identity of each natural person who is an associated person, if any, responsible for the account.[42] The Commission also adopted a related requirement for broker-dealers to provide retail investors with Form CRS[43] and amended Exchange Act Rule 17a–3 to require broker-dealers to maintain a record of the date each Form CRS was provided.[44]

Because dealers may comply with Exchange Act Rule 17a–3 for purposes of transactions in municipal securities by complying with MSRB Rule G–8, the proposed rule change includes amendments to MSRB Rule G–8 that parallel the new Exchange Act Rule 17a–3 requirements relating to Regulation Best Interest and Form CRS. These amendments are necessary to ensure that dealers subject to Regulation Best Interest and the Form CRS requirement are required to maintain the records regardless of which books and records rule they comply with.

B. MSRB Rule G–9

MSRB Rule G–9 prescribes the periods of time that records must be preserved by dealers. Similar to MSRB Rule G–8, MSRB Rule G–9 provides that dealers who are subject to and comply with Exchange Act Rules 17a–3 and 17a–4 under the Act will be deemed to comply with MSRB Rule G–9, provided that certain specified records are preserved for the applicable time periods specified in Rule G–9 in any event. Exchange Act Rule 17a–4 under the Act sets forth record preservation requirements for broker-dealers and, like Exchange Act Rule 17a–3, provides that for purposes of transactions in municipal securities by dealers, compliance with MSRB Rule G–9 will be deemed compliance with Exchange Act Rule 17a–4.

The Commission amended Exchange Act Rule 17a–4 to require broker-dealers to retain the records related to Regulation Best Interest and Form CRS described above, as well as a copy of each Form CRS for six years.[45] Accordingly, the proposed rule change includes amendments to MSRB Rule G–9 that parallel these new requirements. These amendments are necessary to ensure that dealers are subject to similar requirements regardless of which record preservation rule they comply with.

2. Statutory Basis

The MSRB believes that the proposed rule change is consistent with Section 15B(b)(2) of the Act,[46] which provides that:

> The Board shall propose and adopt rules to effect the purposes of this title with respect to transactions in municipal securities effected by brokers, dealers, and municipal securities dealers and advice provided to or on behalf of municipal entities or obligated persons by brokers, dealers, municipal securities dealers, and municipal advisors with respect to municipal financial products, the issuance of municipal securities, and solicitations of municipal entities or obligated persons undertaken by brokers, dealers, municipal securities dealers, and municipal advisors.

Section 15B(b)(2)(C) of the Act[47] provides that the MSRB's rules shall:

> [B]e designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in municipal securities and municipal financial products, to remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products, and, in general, to protect investors, municipal entities, obligated persons, and the public interest.

The proposed rule change is consistent with Section 15B(b)(2)(C) of the Act because it is designed to prevent fraudulent and manipulative practices by dealers, foster cooperation and coordination among regulators, promote just and equitable principles of trade, and protect investors.

I. Statutory Basis for Amendments Related to Suitability

The proposed amendments to MSRB Rules G–19 and G–48 are consistent with Section 15B(b)(2) of the Act because the amendments will foster cooperation and coordination with regulators, facilitate transactions in municipal securities and municipal financial products, remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products, and protect investors, as described below.

A. Eliminating the Applicability of MSRB Rule G–19 to Recommendations Subject to Regulation Best Interest

The proposed amendments to MSRB Rule G–19 eliminating the applicability of MSRB Rule G–19's suitability requirements to recommendations subject to Regulation Best Interest will foster cooperation and coordination with regulators by harmonizing MSRB rules with the Commission's Regulation Best Interest. Consequently, these amendments will also facilitate transactions in municipal securities and municipal financial products and remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products by eliminating potential regulatory duplication and complexity, which will ease potential regulatory burdens on dealers associated with complying with two regulatory schemes. Dealers will be able to more efficiently analyze and operationalize compliance with Regulation Best Interest and MSRB Rule G–19. For example, dealers can proceed in conforming their municipal securities activities to Regulation Best Interest without engaging in a more extensive analysis of how the obligations of Regulation Best Interest may overlap, exceed, or differ from those of MSRB Rule G–19. Consequently, dealers will be able to more efficiently execute transactions in the municipal securities market with greater regulatory certainty under the proposed amendments.

These proposed amendments to MSRB Rule G–19 will also protect investors by ensuring dealers comply with the heightened regulatory requirements of the Commission's Regulation Best Interest, while maintaining the existing regulatory scheme under MSRB Rule G–19 for transactions not subject to Regulation Best Interest. As stated by the Commission in its adopting of Regulation Best Interest:

> The enhancements contained in Regulation Best Interest are designed to improve investor protection by enhancing the quality of broker-dealer recommendations to retail customers and reducing the potential harm to

[41] 17 CFR 240.17a–3.

[42] 17 CFR 240.17a–3(a)(35).

[43] 17 CFR 240.17a–14.

[44] 17 CFR 240.17a–3(a)(24).

[45] 17 CFR 240.17a–4(e)(5), (e)(10).

[46] 15 U.S.C. 78*o*–4(b)(2).

[47] 15 U.S.C. 78*o*–4(b)(2)(C).

retail customers that may be caused by conflicts of interest.[48]

For the same reasons, the MSRB believes that these amendments in the proposed rule change are consistent with the investor protection requirements of Section 15B(b)(2)(C) of the Act.[49]

B. Aligning MSRB Rule G–19's Quantitative Suitability Obligation to the Requirements of Regulation Best Interest

The proposed amendments to MSRB Rule G–19 aligning MSRB Rule G–19's quantitative suitability obligation to the requirements of Regulation Best Interest will foster cooperation and coordination with regulators by harmonizing MSRB rules with the Commission's Regulation Best Interest. Consequently, these amendments will also facilitate transactions in municipal securities and municipal financial products and remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products by eliminating potential regulatory duplication and complexity, which will ease potential regulatory burdens on dealers associated with complying with two regulatory schemes. Conforming the quantitative suitability requirement of MSRB Rule G–19 with Regulation Best Interest's Care Obligation will allow dealers to more efficiently operationalize compliance with their obligations under both requirements, and to more efficiently execute transactions in the municipal securities market with greater regulatory certainty.

The proposed amendment to the quantitative suitability obligation of MSRB Rule G–19 will also protect investors by heightening the requirements of MSRB Rule G–19 for recommendations not subject to Regulation Best Interest.[50] Accordingly, the MSRB believes that these amendments are consistent with the investor protection requirements of Section 15B(b)(2)(C) of the Act.[51]

C. Amending MSRB Rule G–48(c) To State That the Exception From the Customer-Specific Suitability Requirement Is Available Only When a Recommendation Is Subject to MSRB Rule G–19

The proposed amendments to MSRB Rule G–48(c) to state that the exception from the customer-specific suitability requirement is available only when a recommendation is subject to MSRB Rule G–19 will foster cooperation and coordination with regulators by harmonizing MSRB rules with Regulation Best Interest. Consequently, these amendments will also facilitate transactions in municipal securities and municipal financial products and remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products by eliminating potential regulatory duplication and, thereby, ease potential regulatory burdens on dealers associated with complying with two regulatory schemes. More specifically, dealers will not have to analyze whether aspects of complying with MSRB Rule G–19's suitability obligations in some circumstances could fail to satisfy the requirements of Regulation Best Interest. Consequently, dealers will be able to more efficiently execute transactions in the municipal securities market with greater regulatory certainty under the proposed amendments.

II. Statutory Basis for Amendments Related to Non-Cash Compensation

The proposed amendments to MSRB Rule G–20 related to non-cash compensation are consistent with Section 15B(b)(2) of the Act because the amendments will foster cooperation and coordination with regulators by harmonizing MSRB rules. Consequently, these amendments will also facilitate transactions in municipal securities and municipal financial products and remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products by eliminating potential regulatory duplication and, thereby, ease potential regulatory burdens on dealers associated with complying with two regulatory schemes. Consequently, dealers will be able to more efficiently execute transactions in the municipal securities market with greater regulatory certainty under the proposed amendments.

III. Statutory Basis for Amendments Related to Books and Records

The proposed amendments to MSRB Rules G–8 and G–9 are consistent with Section 15B(b)(2) of the Act because the amendments will foster cooperation and coordination with regulators, facilitate transactions in municipal securities and municipal financial products, remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products, and protect investors.

A. Amending MSRB Rule G–8 to Align With Exchange Act Rule 17a–3

Because dealers may comply with Exchange Act Rule 17a–3 for purposes of transactions in municipal securities by complying with MSRB Rule G–8, the proposed rule change includes amendments to MSRB Rule G–8 that parallel the new Exchange Act Rule 17a–3 requirements relating to Regulation Best Interest and Form CRS. These amendments will foster cooperation and coordination with regulators by harmonizing MSRB rules with the Commission's record-keeping requirements under Exchange Rule Act Rule 17a–3, as amended by Regulation Best Interest. Consequently, these amendments will also facilitate transactions in municipal securities and municipal financial products and remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products by providing greater regulatory certainty to dealers in the application of record-keeping requirements associated with municipal securities transactions. In this way, the proposed rule change will ease certain regulatory burdens on dealers when attempting to comply with the record-keeping requirements under MSRB Rule G–8 and Exchange Act Rule 17a–3.

The proposed amendments to MSRB Rule G–8 will also protect investors by requiring dealers to create and maintain books and records, as applicable, to demonstrate compliance with Regulation Best Interest and the SEC's Form CRS requirements.[52] These proposed amendments are coordinated with SEC books and records requirements to ensure that dealers are subject to similar requirements, whether under MSRB rules or the rules of the SEC.

B. Amending MSRB Rule G–9 To Align With Exchange Act Rule 17a–4

In its adoption of Regulation Best Interest, the Commission amended Exchange Act Rule 17a–4 to require dealers to retain the records related to Regulation Best Interest and Form CRS described above, as well as a copy of

[48] Regulation Best Interest Adopting Release, 83 FR at 33321.

[49] 15 U.S.C. 78*o*–4(b)(2)(C).

[50] *See, e.g.,* Regulation Best Interest Adopting Release, 83 FR at 33321.

[51] 15 U.S.C. 78*o*–4(b)(2)(C).

[52] *See* Regulation Best Interest Adopting Release, 83 FR at 33398 (''The Commission notes that the proposed new requirements of Rule 17a–3 are not designed to create additional, standalone burdens for broker-dealers but instead to provide a means by which they can demonstrate, and Commission examiners can confirm, their compliance with the new substantive requirements of Regulation Best Interest.'').

each Form CRS for six years.[53] Accordingly, the proposed rule change includes amendments to MSRB Rule G–9 that parallel these new requirements. These amendments will foster cooperation and coordination with regulators by harmonizing MSRB rules with the Commission's record-keeping requirements under Exchange Rule Act Rule 17a–4, as amended by Regulation Best Interest. These amendments will also facilitate transactions in municipal securities and municipal financial products and remove impediments to and perfect the mechanism of a free and open market in municipal securities and municipal financial products by providing greater regulatory certainty to dealers in the application of record-keeping requirements associated with municipal securities transactions. In this way, the proposed rule change will ease regulatory burdens on dealers when complying with the record-keeping requirements under MSRB Rule G–9 and Exchange Act Rule 17a–4.

The proposed amendments to MSRB Rule G–9 will protect investors by requiring dealers to create and maintain books and records, as applicable, to demonstrate compliance with Regulation Best Interest and the SEC's Form CRS requirements.[54] These proposed amendments are coordinated with SEC books and records requirements to ensure that dealers are subject to similar requirements, whether under MSRB rules or the rules of the SEC.

B. Self-Regulatory Organization's Statement on Burden on Competition

Section 15B(b)(2)(C) of the Exchange Act requires that MSRB rules not be designed to impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act.[55] As discussed below, the proposed rule change would align MSRB rules with, or otherwise clarify the applicability of MSRB rules in relation to, the requirements of Regulation Best Interest. For those dealers that are already subject to Regulation Best Interest, the MSRB does not believe that the proposed rule change would result in any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act because the proposed rule change would apply equally to all these dealers.[56]

1. Need for Proposed Rule Change

The adoption of Regulation Best Interest necessitates the proposed rule change consisting of amendments to MSRB Rules G–8, G–9, G–19, G–20 and G–48 described above. The proposed rule change is needed to harmonize Regulation Best Interest and relevant MSRB rules, to clarify and enhance dealers' regulatory obligations under MSRB rules when making recommendations involving municipal securities to retail investors, and thus to enhance investor protection. In addition, the proposed rule change is designed to better harmonize MSRB requirements with relevant FINRA rules.

Specifically, the proposed rule change would eliminate the applicability of Rule G–19 with regard to recommendations subject to Regulation Best Interest, align Rule G–19's quantitative suitability obligation with the requirements of Regulation Best Interest, amend Rule G–48 to make clear that the exception from the requirement to conduct a customer-specific suitability obligation when making a recommendation to an SMMP does not apply to recommendations that are subject to Regulation Best Interest, and align Rule G–20's permissible non-cash compensation to the requirements of Regulation Best Interest. In addition, the proposed rule change includes amendments to MSRB Rule G–8 and Rule G–9 on books and records that parallel the new Exchange Act Rule 17a–3 and 17a–4 requirements related to Regulation Best Interest and Form CRS under the Exchange Act.

2. Baseline for Evaluation

In order to evaluate the potential economic impact of any proposed rule change, a baseline must be established as a point of reference. This baseline enables a comparison to the expected state with the proposed rule change in effect. The economic impact of the proposed change is therefore viewed as the difference between the *baseline state* and the *expected state.* Typically, the baseline is defined as the present state before any proposed rule change is approved and implemented. For dealers subject to Regulation Best Interest, however, the future state after the Regulation Best Interest compliance date is a more appropriate baseline, as the MSRB's proposed rule change is in response to and closely tied to the future implementation of Regulation Best Interest.

3. Alternative Approaches

The MSRB identified and reviewed two options as alternatives to the changes outlined previously. In one alternative approach, the MSRB would eliminate MSRB Rule G–19 on suitability. However, Regulation Best Interest is only applicable to recommendations made to retail customers and is not applicable to recommendations made to other customers, such as institutions. If Rule G–19 were eliminated, no suitability rule would apply when dealers make recommendations regarding municipal securities that are not covered by Regulation Best Interest. In addition, Regulation Best Interest does not apply to bank dealers, while MSRB Rule G–19 applies to all dealers, including bank dealers. Consequently, this alternative would likely reduce protection to investors and thus be inferior to the proposed rule change. The second alternative is to require bank dealers to also comply with Regulation Best Interest, in addition to the proposed changes described above. As noted above, the MSRB plans to issue a Request for Comment on applying the requirements of Regulation Best Interest to bank dealers through further amendments to MSRB rules to further inform its consideration of this approach.

4. Benefits, Costs and Effect on Competition

Pursuant to the MSRB's policy on economic analysis in rulemaking, economic analysis should address the likely costs and benefits of the draft amendments. The economic analysis assesses the draft amendments as if they were fully implemented against the

[53] 17 CFR 240.17a–4(e)(5), (e)(10). As described above, registered broker-dealers and investment advisers are required to provide retail investors with a relationship summary on new Form CRS. Pursuant to this requirement, ''[r]etail investors will receive a relationship summary at the beginning of a relationship with a firm, communications of updated information following a material change to the relationship summary, and an updated relationship summary upon certain events.'' Exchange Act Release No. 86032 (June 5, 2019), 84 FR 33492 (July 12, 2019).

[54] *See* Regulation Best Interest Adopting Release, 83 FR at 33400 (''. . . the Commission believes it is important, including for examination purposes, that broker-dealers separately retain records that specifically demonstrate compliance with Regulation Best Interest and new paragraph (a)(35) of Rule 17a–3 . . .'').

[55] 15 U.S.C. 78*o*–4(b)(2)(C).

[56] For bank dealers that are not subject to Regulation Best Interest, to the extent these bank dealers are currently making recommendations of municipal securities to retail customers, the MSRB believes that a potential regulatory imbalance between bank dealers and dealers other than bank dealers likely will exist as of the compliance date of Regulation Best Interest. However, the MSRB plans to issue a Request for Comment on whether it will apply the requirements of Regulation Best Interest to bank dealers through further amendments to MSRB rules.

context of the economic baselines discussed above. In considering these costs, benefits, and impacts, the Board addresses reasonable alternatives, where applicable.

The SEC estimated in its filing that there was a total of 2,766 broker-dealers who had retail customers at the end of 2018. By comparison, the MSRB's Real-Time Transaction Reporting System (''RTRS'') trading records indicate that there are 768 dealers that are subject to Regulation Best Interest and had at least one municipal security trade with customers in 2019 with a trade size of $100,000 par amount or lower, a proxy for retail-sized trades.[57]

Since all dealers other than bank dealers are required to be in full compliance with Regulation Best Interest, the cost and benefit assessment focuses on the incremental impact of the proposed MSRB rule changes, beyond the costs and benefits of compliance with Regulation Best Interest.

A. Benefits

The MSRB believes that the proposed rule change would benefit dealers by clarifying and harmonizing their regulatory obligations under MSRB rules considering the upcoming implementation of Regulation Best Interest. Dealer compliance with the proposed rule change would provide greater certainty to dealers about when Regulation Best Interest applies rather than MSRB Rule G–19. This would in turn enhance investor protection as a result of dealers being clearer about when Regulation Best Interest applies.

The proposed rule change would also foster cooperation and coordination by harmonizing MSRB rules with Regulation Best Interest and related FINRA rules. The MSRB generally considers it desirable and efficient to improve the clarity and consistency of MSRB rules in relation to the rules of other regulators, particularly to the extent such changes may eliminate inconsistencies between rules of different regulators, ease the burdens of dealer compliance and lessen instances of confusion among dealers without reducing investor protections. Specifically, the proposed rule change will allow dealers to conform their policies and procedures and related business practices to Regulation Best Interest, MSRB Rule G–19 and FINRA's suitability rule without engaging in a more extensive analysis of how the obligations of each rule may overlap, exceed, or differ from each other.

[57] While not a perfect proxy for a retail trade, the MSRB believes that the relatively low par amount is more indicative of a trade with a retail customer than an institutional investor.

B. Costs

For dealers, the MSRB believes the costs of complying with the proposed rule change that are incremental to the already allotted and absorbed costs of complying with Regulation Best Interest will be minor, given that dealers other than bank dealers are assumed to be in full compliance with Regulation Best Interest already when the proposed MSRB rule changes become effective. Bank dealers would not incur costs in complying with Regulation Best Interest and would continue to comply with MSRB Rule G–19, as amended to remove the control element from the quantitative suitability obligation.

The proposed rule change would trigger one-time policy and procedure revisions by all dealers (including bank dealers) in relation to the changes to MSRB Rule G–19's quantitative suitability requirement. Therefore, there would be upfront costs associated with revising the policies and procedures to comply with the new requirements. It is possible that the one-time revision cost may be proportionately higher for smaller-size dealers than larger-size dealers as a smaller firm may have to rely on outside legal counsel and technology support to review changes on policies and procedures. The MSRB, however, believes the revisions of policies and procedures by dealers would not be overly burdensome or expensive, and on balance, the aggregate benefits expected to accumulate to dealers and retail investors associated with the proposed rule change should outweigh the one-time policy and procedure revision costs over time.[58]

[58] The proposed amendments to MSRB Rules G–8 and G–9 would not impose costs on dealers because these amendments impose no new requirements on dealers beyond those already imposed by Rules 17a–3 and 17a–4, as amended in light of Regulation Best Interest and the Form CRS requirement. Dealers not subject to Regulation Best Interest or the Form CRS requirement would not be required to maintain these records under MSRB Rules G–8 and G–9, as amended by the proposed rule change. Similarly, the proposed amendment to MSRB Rule G–20 would not impose costs on dealers because it imposes no new requirements on dealers beyond those already imposed by Regulation Best Interest. The proposed deletion of the interpretation of MSRB Rule G–20 would similarly impose no costs because it does not impose requirements on dealers beyond those of MSRB Rule G–20. Finally, the proposed amendment to MSRB Rule G–48 states that the existing exception to the MSRB Rule G–19 customer specific suitability obligation is only available in circumstances when MSRB Rule G–19, rather than Regulation Best Interest, applies and imposes no new obligations on dealers. Accordingly, this proposed amendment should not impose costs on dealers.

C. Effect on Competition, Efficiency and Capital Formation

The MSRB believes the proposed rule change may improve dealers' regulatory certainty by promoting clarity and consistency on issues related to suitability and permissible non-cash compensation. The MSRB also believes the proposed rule change would not result in undue burden on competition for dealers subject to Regulation Best Interest, as the proposed rule change would have a relatively mild impact on dealers who are in full compliance with Regulation Best Interest. For these dealers, the incremental impact of the proposed rule change should be limited to the need to update their policies and procedures to reflect the removal of the control element from the quantitative suitability obligation of MSRB Rule G–19, as noted above. Since this proposed amendment to Rule G–19 conforms with the care obligation of Regulation Best Interest, dealers likely have already implemented necessary changes to policies and procedures to comply with the obligation in the context of Regulation Best Interest.

For bank dealers that are not subject to Regulation Best Interest, to the extent these bank dealers are currently offering recommendations of municipal securities to retail customers, the MSRB believes that they could gain an advantage over dealers (other than bank dealers) by incurring less compliance costs, unless MSRB rules apply Regulation Best Interest to bank dealers. While this cohort of bank dealers makes up a relatively small percentage of all dealers that transact in municipal securities,[59] the MSRB plans to issue a Request for Comment on whether it will apply Regulation Best Interest to bank dealers through further amendments to MSRB rules to address this regulatory imbalance.

The MSRB believes the proposed rule change would not impose barriers on capital formation, as the intention is to harmonize MSRB rules with Regulation Best Interest and related FINRA rules.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Board did not solicit comment on the proposed rule change. Therefore,

[59] *See, e.g.,* Broker-Dealers and Bank Dealers Registered with the MSRB, available at *http://www.msrb.org/BDRegistrants.aspx.* Using retail-sized dealer-to-customer trades (par value at $100,000 or less in this case) from MSRB's RTRS database as a proxy for the degree of interaction with retail customers, the MSRB found that only 17 bank dealers conducted at least one retail-sized trade in 2019.

there are no comments on the proposed rule change received from members, participants, or others.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Within 45 days of the date of publication of this notice in the **Federal Register** or within such longer period of up to 90 days (i) as the Commission may designate if it finds such longer period to be appropriate and publishes its reasons for so finding or (ii) as to which the self-regulatory organization consents, the Commission will:

(A) By order approve or disapprove such proposed rule change, or

(B) institute proceedings to determine whether the proposed rule change should be 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 (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov*. Please include File Number SR–MSRB–2020–02 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549.

All submissions should refer to File Number SR–MSRB–2020–02. 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 (*http://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 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the MSRB. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–MSRB–2020–02 and should be submitted on or before June 2, 2020.

For the Commission, pursuant to delegated authority.[60]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2020–10061 Filed 5–11–20; 8:45 am]

BILLING CODE 8011–01–P

[60] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88825; File No. SR–CTA/CQ–2019–04]

Consolidated Tape Association; Order Approving the Thirty-Third Substantive Amendment to the Second Restatement of the CTA Plan and Twenty-Fourth Substantive Amendment to the Restated CQ Plan, as Modified by the Commission, Concerning a Confidentiality Policy

May 6, 2020.

I. Introduction

On November 25, 2019,[1] the Consolidated Tape Association Plan (''CTA Plan'') participants (''Participants'')[2] filed with the Securities and Exchange Commission (''SEC'' or ''Commission'') pursuant to Section 11A of the Securities Exchange Act of 1934 (''Act'')[3] and Rule 608 of Regulation National Market System (''NMS'') thereunder,[4] a proposal to amend the Second Restatement of the CTA Plan and the Restated Consolidated Quotation Plan (''CQ Plan'') (each a ''Plan'' and together with the CTA Plan, the ''Plans'').[5] These amendments represent the Thirty-Third Substantive Amendment to the CTA Plan and Twenty-Fourth Substantive Amendment to the CQ Plan (''Amendments''). As described in the Amendments, the Participants proposed to adopt a confidentiality policy to provide guidelines for the Operating Committee and the Advisory Committee of the Plans, and all subcommittees thereof, regarding the confidentiality of any data or information generated, accessed, or transmitted to the Operating Committee, as well as discussions occurring at a meeting of the Operating Committee or any subcommittee. The Amendments were published for comment in the **Federal Register** on January 14, 2020.[6]

In the Commission's view, the Amendments must balance protection against the potential misuse of confidential information with the strong interest in public transparency about the operations of the Plans in light of the important function the Plans serve in the national market system. This order approves the Amendments to the Plans, as modified by the Commission, to better strike that balance. A copy of the Amendments, as modified by the Commission, is attached as *Exhibit A* hereto. The Commission concludes that

[1] *See* Letter from Robert Books, Chairman, Operating Committee, CTA/CQ Plans, to Vanessa Countryman, Secretary, Commission, dated November 19, 2019 (''Transmittal Letter'').

[2] The Participants are the national securities association and national securities exchanges that submit trades and quotes to the Plans and include: Cboe BYX Exchange, Inc., Cboe BZX Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe EDGX Exchange, Inc., Cboe Exchange, Inc., Financial Industry Regulatory Authority, Inc., The Investors Exchange LLC, Long-Term Stock Exchange, Inc., Nasdaq BX, Inc., Nasdaq ISE, LLC, Nasdaq PHLX, Inc., The Nasdaq Stock Market LLC, New York Stock Exchange LLC, NYSE American LLC, NYSE Arca, Inc., NYSE Chicago, Inc., and NYSE National, Inc. (each a ''Participant'' and collectively, the ''Participants''). Participants also are members of the Plans' Operating Committees. Other parties include the ''Processor,'' who is charged with collecting, processing and preparing for distribution or publication all Plan information. The ''Administrator'' is charged with administering the Plan to include data feed approval, customer communications, contract management, and related functions. The ''Advisory Committee members'' are individuals who represent particular types of financial services firms or actors in the securities market, and who were selected by Plan participants to be on the Advisory Committee. A list of the Processor, Administrator, and Advisory Committee members is available at *https://www.ctaplan.com/governance.*

[3] 15 U.S.C. 78k–1(a)(3).

[4] 17 CFR 242.608.

[5] *See* Securities Exchange Act Release Nos. 10787 (May 10, 1974), 39 FR 17799 (May 20, 1974) (declaring the CTA Plan effective); 15009 (July 28, 1978), 43 FR 34851 (August 7, 1978) (temporarily authorizing the CQ Plan); and 16518 (January 22, 1980), 45 FR 6521 (January 28, 1980) (permanently authorizing the CQ Plan). The most recent restatement of both Plans was in 1995. The CTA Plan, pursuant to which markets collect and disseminate last sale price information for non-NASDAQ listed securities, is a ''transaction reporting plan'' under Rule 601 under the Act, 17 CFR 242.601, and a ''national market system plan'' under Rule 608 under the Act, 17 CFR 242.608. The CQ Plan, pursuant to which markets collect and disseminate bid/ask quotation information for listed securities, is a ''national market system plan'' under Rule 608 under the Act, 17 CFR 242.608.

[6] *See* Securities Exchange Act Release No. 87909 (January 8, 2020), 85 FR 2207 (January 14, 2020) (''Notice''). Comments received in response to the Notice are available at *https://www.sec.gov/comments/sr-ctacq-2019-04/srctacq201904.htm.*

the Amendments, as modified, are appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanism of a national market system, or are otherwise in furtherance of the purposes of the Act.[7]

II. Description of the Proposal

According to the Participants, the confidentiality policy is designed broadly to (i) protect against any potential misuse of confidential information, which includes, but is not limited to, protecting confidential information obtained or generated by the Administrator and Processor in connection with the operation of the securities information processor (''SIP'') operated pursuant to the Plans; as well as (ii) to allow the Operating Committee to disclose confidential information to the Advisory Committee to obtain its input without concern that such confidential information may be shared beyond the Advisory Committee.[8]

Among other things, the Participants believe that the proposed Amendments will allow for more sharing of information with the Advisory Committee regarding the operation of the Plans and elicit more input by the Advisory Committee on Plan matters that might otherwise be deemed confidential.[9] By sharing information that would in the ordinary course be considered appropriate for confidential treatment, the Participants believe that the Advisory Committee will be able to provide more informed advice and recommendations with respect to the operation and governance of the Plans.[10]

A. Proposed Confidentiality Policy

The confidentiality policy proposed by the Participants applies to all representatives of the Participants, Pending Participants, the CTA/CQ Administrator and Processor, and the Advisory Committee. Additionally, it applies to agents of the Operating Committee, including, but not limited to, attorneys, advisors, accountants, contractors or subcontractors, as well as any third parties invited to attend meetings of the Operating Committee or Plan subcommittees. These persons are collectively defined in the confidentiality policy as ''Covered Persons.''[11]

The policy establishes guidelines and procedures for (i) identifying and categorizing types of confidential information, (ii) providing increasing degrees of protection for more sensitive types of confidential information, and (iii) setting forth the circumstances in which disclosure of confidential information may be authorized. The proposed confidentiality policy creates three categories of confidential information: (1) Restricted Information;[12] (2) Highly Confidential Information;[13] and (3) Confidential Information.[14] The proposed confidentiality policy also defines the term ''Public Information.''[15] The confidentiality policy outlines the procedures with respect to identifying documents as Restricted, Highly Confidential, or Confidential as well as the procedures regarding how to treat documents and information in each category. The confidentiality policy places the obligation on the Administrator and the Processor to be the custodians of all documents discussed by the Operating Committee and to maintain the classification of such documents.[16]

B. Procedures Governing Restricted Information

With respect to Restricted Information, to ensure the protection of customer identities and customer-related information, the proposed Amendments provide that such information will be disclosed only when necessary to conduct Plan-related business.[17] Specifically, Restricted Information will be kept in confidence by the Administrator and Processor and will not be disclosed to the Operating Committee or any subcommittee thereof, or during Executive Session,[18] or to the Advisory Committee except in limited circumstances.

C. Procedures Governing Highly Confidential Information

With respect to Highly Confidential Information, the proposed confidentiality policy provides that such information may be disclosed only in Executive Session of the Operating Committee or to the Legal Subcommittee. Highly Confidential Information also may be disclosed to SEC staff, unless it is protected by the Attorney-Client Privilege or the Work Product Doctrine.

In addition, the proposal allows a Covered Person that is a representative of a Participant to disclose Highly Confidential Information to other employees or agents of the Participant or to the Participant's affiliates as needed for such Covered Person to perform his or her function on behalf of the Participant, as reasonably determined by the Covered Person.[19]

Further, because of the heightened concerns regarding the disclosure of Highly Confidential Information, in the event a Covered Person is determined by a majority vote of the Operating

[7] 17 CFR 242.608(b)(2).

[8] *See* Notice, *supra* note 6, 85 FR at 2207. The Amendments also propose to define the term ''Public Information'' and require that certain information be made publicly available. *See* Section 2(d) of the proposed policy.

[9] *See* Notice, *supra* note 6, 85 FR at 2207.

[10] *See id.* at 2208.

[11] As specifically set forth by the Participants under Section 1(b) of the proposed policy, Covered Persons would not include staff of the Commission.

[12] Restricted Information was defined by the Participants under Section 2(a) of the proposed policy as (i) highly sensitive customer-specific financial information, (ii) customer-specific audit information, (iii) other customer financial information, and (iv) ''Personal Identifiable Information.''

[13] Highly Confidential Information was defined by the Participants under Section 2(b) of the proposed policy as (i) any data or information shared in an Executive Session or that would otherwise qualify for confidential treatment pursuant to the Plans' Executive Session Policy; and (ii) any other highly sensitive Participant-specific, customer-specific, individual-specific, or otherwise sensitive information relating to the Operating Committee, Participants, or customers that is not otherwise Restricted Information. Highly Confidential Information includes: A Participant's contract negotiations with the Processor or Administrator; personnel matters; information concerning the intellectual property of Participants or customers; and any document subject to the Attorney-Client Privilege or Work Product Doctrine.

[14] Confidential Information was defined by the Participants under Section 2(c) of the proposed policy as (i) any non-public data or information designated as Confidential by a majority vote of the Operating Committee; (ii) any document generated by a Participant or Advisor and designated by that Participant or Advisor as Confidential; (iii) the minutes of the Operating Committee or any subcommittee thereof unless approved by the Operating Committee for release to the public; and (iv) the individual views and statements of Covered Persons and SEC staff disclosed during a meeting of the Operating Committee or any subcommittees thereunder.

[15] Public Information was defined by the Participants under Section 2(d) of the proposed policy as (i) any information that is not either Restricted Information or Highly Confidential Information or that has not been designated as Confidential Information; (ii) any confidential information that has been approved by the Operating Committee for release to the public; or (iii) any information that is otherwise publicly available. Public Information includes, but is not limited to, any topic discussed during a meeting of the Operating Committee, an outcome of a topic discussed, or a Final Decision of the Operating Committee.

[16] The Administrator may, under delegated authority, designate documents as Restricted, Highly Confidential, or Confidential, which will be determinative unless altered by a majority vote of the Operating Committee.

[17] *See* Notice, *supra* note 6, 85 FR at 2209.

[18] *See* Section III(e)(iv) of the CTA Plan (providing for the use of ''Executive Sessions'' in which the Operating Committee meets without members of the Advisory Committee present).

[19] The proposal requires that the policy be made available to the recipient and states that the recipient will be required to abide by the confidentiality policy.

Committee to have disclosed Highly Confidential Information, the proposal authorizes the Operating Committee to determine the appropriate remedy for the breach based on the facts and circumstances of the event.[20]

D. Procedures Governing Confidential Information

Under the proposed confidentiality policy, Confidential Information may be disclosed to the Operating Committee, any subcommittee thereof, and the Advisory Committee. A Covered Person may not disclose Confidential Information to any individual that is not either a Covered Person or a member of the SEC staff, except with authorization of the Operating Committee, or as may be otherwise required by law.[21]

Further, in order to elicit industry feedback, members of the Advisory Committee may be authorized by the Operating Committee to disclose particular Confidential Information to enable them to consult with third-party industry representatives or technical experts subject to certain restrictions.

As it does for Highly Confidential Information, the proposal allows a Covered Person that is a representative of a Participant to disclose Confidential Information to other employees or agents of the Participant or to the Participant's affiliates as needed for such Covered Person to perform his or her function on behalf of the Participant, as reasonably determined by the Covered Person.[22]

Finally, the proposal requires a Covered Person that discloses Confidential Information without the authorization of the Operating Committee to report such disclosure to the Chair of the Operating Committee, which will then be recorded in the minutes of the meeting of the Operating Committee.[23]

[20] For the representatives of a Participant, the proposal specifies that appropriate remedies include a letter of complaint submitted to the SEC, which may be made public by the Operating Committee. For a member of the Advisory Committee, the proposal specifies that appropriate remedies include removal of that member from the Advisory Committee.

[21] With respect to Confidential Information that is generated by a Participant or member of the Advisory Committee, the Operating Committee may authorize its disclosure only with the consent of that Participant or Advisory Committee member.

[22] The proposal requires that the policy be made available to the recipient and states that the recipient will be required to abide by the confidentiality policy.

[23] The proposal further requires the name(s) of the person(s) who disclosed such Confidential Information to be recorded in any publicly available summaries of Operating Committee minutes.

III. Discussion and Modifications by the Commission

Pursuant to Rule 608, the Commission shall approve the amendments, ''with such changes or subject to such conditions as the Commission may deem necessary or appropriate,'' if it finds that the amendments are ''necessary or appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanisms of, a national market system, or otherwise in furtherance of the purposes of the Act.'' [24] After carefully considering the comments received on the Amendments, the Commission is approving the Amendments, as modified by the Commission pursuant to Section 11A of the Act [25] and Rule 608 thereunder. The Commission believes the Plans should have a confidentiality policy, but believes that the modifications discussed in detail below are appropriate.

A. Scope

1. Applicability

In the Notice, the Commission solicited comments on, among other things, whether the proposed guidelines and procedures setting forth the circumstances in which disclosure of confidential information may be authorized are sufficiently clear and comprehensive.[26] Among other questions, the Commission asked whether commenters believe ''that the scope of the proposed Amendments are sufficiently comprehensive to cover all parties that might have access to confidential information, or should the scope be broadened to apply to additional classes of persons.'' For example, the Commission asked whether ''outsourced service providers (including, but not limited to, firms and persons that provide audit services, accounting services, or legal services to the Plans, the Administrator, or the Processor) [should] be subject to additional restrictions, particularly if they are directly or indirectly affiliated with a Participant, the Administrator, the Processor, or any entity that offers separately proprietary data products to a substantially similar customer base, *i.e.,* customers or potential customers of the SIPs.'' [27] The Commission further asked whether the Plans should ''explicitly preclude themselves from engaging with an Administrator, Processor, auditor, or any agents or third parties thereof, unless the entity establishes, maintains, and enforces policies and procedures to safeguard confidential and proprietary information and to prevent its direct or indirect misuse'' and, if so, whether ''the Operating Committee [should] review those policies and procedures and/or should they be made public (*i.e.,* provided on the Plans' website).'' [28]

In response to the Notice, the Advisory Committee said it believes that ''the confidentiality policy should extend to any information obtained by outsourced service providers in order to ensure that information learned by such service providers is only shared with those individuals of the Operating Committee required to receive such information and in furtherance of the service provider's agreement with the plan.'' [29] Another commenter similarly stated that ''[o]utsourced service providers (including, but not limited to, firms and persons that provide audit, accounting, or legal services to the Plan(s), the Administrator, or the Processor) should be subject to additional restrictions, particularly if they are directly or indirectly affiliated with a Participant Administrator, Processor, or any entity that offers separately proprietary data products to a substantially similar customer base.'' [30] The commenter further recommended that the ''Plan(s) should explicitly preclude themselves from engaging with an Administrator Processor, auditor, or any agents or third parties thereof, unless the entity attests and adheres to the confidentiality policies and procedures established by the Plan . . . and provides conflicts of interest disclosures.'' [31]

[24] 17 CFR 608(b)(2).

[25] 15 U.S.C. 78k–1.

[26] *See* Notice, *supra* note 6, 85 FR at 2211.

[27] *Id.* at 2212.

[28] *Id.*

[29] Letter from CTA/UTP Advisory Committee to Vanessa Countryman, Secretary, Commission, dated January 24, 2020 (''Advisory Committee Letter'') at 2.

[30] Letter from Joseph Kinahan, Managing Director, Client Advocacy and Market Structure, TD Ameritrade to Vanessa A. Countryman, Secretary, Commission, dated February 4, 2020 (''TD Ameritrade Letter'') at 9.

[31] *Id.* Other comments received in response to the Commission's separate notice of a proposed order concerning a new NMS plan regarding consolidated equity market data (Securities Exchange Act Release No. 87906 (January 8, 2020), 85 FR 2164 (January 14, 2020) (File No. 4–757) (''Governance Notice'') also supported a robust confidentiality policy that would apply to SRO and non-SRO persons. *See, e.g.,* Letter from Sherry Madera, Chief Industry Government Affairs Officer, Refinitiv, to Vanessa Countryman, Secretary, Commission, dated February 27, 2020 at 3; Letter from Lisa Mahon Lynch, Associate Director, Global Trading, Wellington Management Company LLP, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 2; Letter from Anders Franzon, General Counsel, Members Exchange LLC, to Vanessa Countryman, Secretary, Commission, dated

After considering the comments received in response to the Amendments, the Commission believes that it is appropriate to modify the scope of the Amendments to extend them to affiliates and employees of the Operating Committee, a Participant, a Pending Participant, the Administrator, and the Processor. The Commission agrees with commenters that the scope of the proposed Amendments should be broadened to include other parties or persons that might have access to confidential information, including but not limited to outsourced service providers, such as firms and persons that provide audit services, accounting services, or legal services to the Plans, Administrator, or Processor.[32] The Commission believes that all parties that generate, receive, or have access to sensitive Plan-related information by virtue of their service to the Plans, or their affiliation with a party that has such access, should be subject to the same standards to protect the confidentiality of that information. Including them within the scope of the Amendments will strengthen the confidentiality of information protections afforded by the policy.

More specifically, the Commission is concerned about the possibility of a Participant exchange obtaining commercially valuable data and information through its affiliates and employees that have responsibilities to the Plans, and then using that information and/or sharing it with employees or affiliates of the Participant exchange to benefit the exchange's proprietary data businesses. The conflicts resulting from such access could influence decisions as to the Plans' operation and thereby impede their ability to achieve the goals of the Plans to ensure the ''prompt, accurate, reliable, and fair collection, processing, distribution and publication of information with respect to quotations for and transactions in such securities and the fairness and usefulness of the form and content of such information.'' [33]

Accordingly, the Commission is adding the phrase ''affiliates, employees, and'' to Section 1(b) and repeating the phrase ''a Participant, a Pending Participant, the Administrator, and the Processor,'' to provide that the policy will apply to ''affiliates, employees, and agents of the Operating Committee, a Participant, a Pending Participant, the Administrator, and the Processor.'' [34] Similarly, the Commission is adding the phrase ''Covered Persons'' to the start of Section 1(c) and deleting the words ''The Administrator and Processor,'' to track the scope of Section 1(b) and the term ''Covered Persons'' used therein. The Commission also is moving text, beginning with the second sentence of Section 1(c), to create a new Section (d) and adding thereto the phrase ''and the control of their Agents,'' to specifically require the written confidential information policies, which the Administrator and Processor must establish to protect information under their control, to also apply to information under the control of Agents of the Administrator and Processor. The Participants state that these provisions, like all others in the proposal, were discussed with, and incorporate input and comments received from, members of the Advisory Committee.[35] Consistent with comments received in response to the proposed Amendments from, among others, members of the Advisory Committee, however, the Commission believes that these changes are appropriate to help ensure that the scope of the proposed Amendments is sufficiently broad so as to encompass other parties or persons that might have access to confidential information.

Further, the Commission believes that it is appropriate to modify the reference to ''all members of the Advisory Committee'' in Section 1(b) to be ''all members of the Advisory Committee and their employers'' to require that Advisory Committee members' firms must protect the confidentiality of Plan information in the same way, for example, that a representative of a Participant's firm is required by this modified Amendment to protect the confidentiality of Plan information.[36] In addition, Section 1(b) of the proposed policy provides that ''[a]ll Covered Persons must adhere to the principles set out in this Policy.'' The Commission believes that it is appropriate to modify Section 1(b) to add a provision whereby ''all Covered Persons that are natural persons may not receive Plan data and information until they affirm in writing that they have read this Policy and undertake to abide by its terms.'' The Commission believes that this additional provision will strengthen Section 1(b) of the policy by prohibiting access to Plan data and information until a Covered Person has affirmed in writing that the Covered Person has read the policy and undertaken to abide by its terms.

2. Classification Based Solely on Content

With respect to proposed guidelines for the classification of information, the Commission solicited comments on whether information shared in Executive Sessions should be classified as Highly Confidential simply because it had been shared in an Executive Session, or whether information should ''be classified based solely on its content and competitive sensitivity.'' [37]

In response, one commenter stated its belief that ''information shared in

February 28, 2020 at 6; Letter from Jennifer W. Han, Associate General Counsel, Managed Funds Association, and Adam Jacobs-Dean, Managing Director, Global Head of Markets Regulation, Alternative Investment Management Association, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 5; Letter from Ellen Greene, Managing Director, Equity & Options Market Structure, Securities Industry and Financial Markets Association, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 6; Letter from Rich Steiner, Head of Client Advocacy and Market Innovation, RBC Capital Markets, LLC, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 4; Letter from Joe Wald, Chief Executive Officer, and Ray Ross, Chief Technology Officer; Clearpool Group, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 5; Letter from Daniel Keegan, Head of North America Market Securities Services, Co-Head of Global Equities & Securities Services, Citigroup Global Markets Inc., to Vanessa Countryman, Secretary, Commission, dated March 2, 2020 at 4.

[32] Firms and persons that provide audit services, accounting services, or legal services, depending on the services that they are performing for the Plans, may or may not be licensed and/or registered if they are not otherwise required to be so licensed or registered under applicable law. For example, a person that works on audits of SIP subscribers' data usage and customer classifications for compliance with SIP billing requirements might not herself be a registered public accountant. Persons that are registered and/or licensed may be subject to pre-existing professional standards of conduct that separately provide for the protection of confidential client information and impose other professional responsibility obligations. Whether persons are licensed and/or registered or not, the Commission believes that extending the Amendments to cover affiliates and employees is appropriate to ensure the protection of confidential information in light of the unique conflicts of interest inherent in Plan governance and operations. To the extent disclosure of confidential information is required by law or professional ethics obligations, the proposed Amendments provide for that possibility and allow such disclosure.

[33] 15 U.S.C. 78k–1(c)(1)(B).

[34] In addition, in the non-exhaustive list of Agents contained in Section 1(b), the Commission is adding the word ''auditors.'' While auditors are already covered as ''contractors or subcontractors,'' auditors have access to competitively sensitive non-public information. Explicitly listing them avoids any doubt that they are covered by the confidentiality policy.

[35] *See* Notice, *supra* note 6, 85 FR at 2208, 2210.

[36] This change, together with other modifications made by the Commission, should enhance the ability of Advisory Committee members to seek meaningful input from their respective employers while helping to ensure that standards for the sharing of protected information apply on equal terms to all Covered Persons. *See* Section 3(d)(iii) (allowing the Operating Committee to authorize Advisors to disclose particular Confidential Information for consultation purposes).

[37] *See* Notice, *supra* note 6, 85 FR at 2211.

Executive Session should be classified based solely on its content and competitive sensitivity, and not simply due to the fact that such information was shared during Executive Session.'' [38] Another commenter stated that ''information shared in Executive Session should not, by virtue of that fact alone, be treated as highly confidential. Rather, a case-by-case analysis is appropriate to determine whether or not information warrants confidential treatment.'' [39]

The Commission agrees with commenters that policies and procedures for the classification of information should be based on the content and sensitivity of the information, rather than on the venue in which the information is shared.

The Commission is therefore adding new Section 1(e) to require that ''[i]nformation will be classified solely based on its content.'' Consistent with that modification, the Commission believes that it is appropriate to modify the definition of ''Highly Confidential Information'' in Section 2(b) to delete therefrom a clause that would have classified information as ''Highly Confidential'' solely because it was shared in Executive Session or pursuant to the Executive Session policy. Specifically, the Commission is deleting subsection (i) containing the words ''(i) any data or information shared in an Executive Session or that would otherwise qualify for confidential treatment pursuant to the Plan's Executive Session Policy; and (ii)'' and making a conforming change to delete the word ''other'' from the start of current subsection (ii).[40] The Participants state that Executive Sessions are used sparingly to discuss a limited set of topics, as listed in the Plan's Executive Session policy, and that the proposed policy seeks to further facilitate the sharing of additional confidential information with the Advisory Committee.[41] The Commission recognizes the Operating Committee's efforts to limit the use of Executive Sessions. Consistent with comments received, however, the Commission believes that methods for classification of information should be based on the content and sensitivity of information, rather than on the forum in which the information is shared.

Executive Sessions may be appropriate for Participants to discuss information that, on its own merits, is Highly Confidential and therefore not appropriate for broad dissemination. Executive Sessions should not shield from public dissemination information that is not sensitive or customer-specific and would not otherwise fall within the definitions of Restricted or Highly Confidential. But by classifying information based merely upon its being shared in Executive Session, the proposed policy may have the effect of shielding information that was not otherwise restricted or confidential. The Commission believes that a content-based approach to classifying information should help balance the need to safeguard sensitive information with the important interest of providing greater transparency into the governance and operation of the Plan. The Commission does not believe that its modifications will inhibit information sharing within the Operating Committee. Rather, sensitive information, as well as information that is specific to individual persons and entities, that is Highly Confidential will continue to be protected, including through permissible use of Executive Sessions, while information that does not meet that standard can and should be shared with Advisors on the Operating Committee and, where appropriate, with the public.

3. Operating Committee Review of Policies

In the Notice, with respect to proposed policies and procedures for the classification of information, the Commission solicited commenters' views with respect to whether ''a need may arise for information or data that are not initially categorized as confidential to be categorized as such at a later point in time'' and, if so, whether the Operating Committee should ''be able to classify or de-classify material as appropriate based on a majority vote.'' [42] Similarly, the Commission asked whether the Amendments ''should require all Participants and other Covered Persons to establish, maintain, and enforce policies and procedures to safeguard confidential and proprietary information received via their participation in the Plans and to prevent its misuse by such Participants or entities controlling, controlled by, or under common control with such Participants.'' [43] The Commission further asked whether commenters agree ''that certain confidential information may become less sensitive if it is anonymized and aggregated'' and even whether ''certain types of restricted or highly confidential information could be anonymized and aggregated to the point where it could be classified as public.'' [44] The Commission asked about the methodology for anonymizing confidential information and whether the methodology should be standardized.[45] The Commission also asked whether these policies should ''be subject to review and approval by the Operating Committee, and be posted publicly, to help ensure their adequacy and completeness.'' [46]

In response, one commenter stated ''the Plan(s) should explicitly define the required policies and procedures to safeguard confidential and proprietary information'' and designate responsibility for their development to one body to ensure a standardized approach.[47] With respect to the classification of data or information, the commenter stated that ''a need may arise for information or data that are not initially categorized as confidential to be categorized as such at a later point in time,'' pointing out that one ''would anticipate the Plan Administrator may classify such document as Confidential subject to the next meeting of the Operating Committee, where they should be granted authority to review and re-classify or de-classify material as appropriate based on a majority vote.'' [48] With respect to methods for rendering information less sensitive, the commenter believed that ''[c]ertain confidential information may become less sensitive if it is anonymized and aggregated,'' adding that ''[c]ertain types of restricted or highly confidential information could be anonymized and aggregated to the point where it could be classified as confidential or public.'' [49] According to the commenter, ''[t]he methodology for redacting/aggregating/anonymizing confidential information should be standardized such that the Administrator, Processor, auditor, and all other relevant parties follow a consistent practice. The methodology should include requirements for what information should always be redacted/aggregated/anonymized (*e.g.,* customer names, size/

[38] TD Ameritrade Letter, *supra* note 30, at 7. According to the commenter, ''[a]llowing information to be classified based on its content provides for a flexible policy that will mature without the need for amendment as markets evolve.'' *Id.*

[39] Letter from Rich Steiner, Head of Client Advocacy and Market Information, RBC Capital Markets, to Vanessa Countryman, Secretary Commission, dated February 4, 2020 (''RBC Letter'') at 2–3.

[40] As such, the definition no longer contains two subsections.

[41] *See* Notice, *supra* note 6, 85 FR at 2208.

[42] *Id.* at 2211.

[43] *Id.*

[44] *Id.* at 2212.

[45] *Id.*

[46] *Id.*

[47] TD Ameritrade Letter, *supra* note 30, at 4.

[48] *Id.* at 6.

[49] *Id.* at 9.

demographic information that could reasonably be used to determine the name of the customer, etc.).'' [50] The commenter recommended that ''[i]f any information that is anonymized, aggregated or redacted could still reasonably be used, whether independently or with current information available in the industry, to identify less than or equal to two firms/Participants, then such information may not be re-classified to public.'' [51]

After considering the comments received in response to the Notice, the Commission believes that it is appropriate to modify Section 1(c) (now located in Section 1(d)), which requires the Administrator and Processor to establish written confidentiality policies, to more specifically provide that those documents should include ''policies and procedures that provide systemic controls for classifying, declassifying, redacting, aggregating, anonymizing, and safeguarding information.'' The Commission believes that adding this detail is appropriate because it outlines the items that the written confidentiality policies must, at a minimum, address in order to protect the confidentiality of Plan information.

In addition, the Commission believes that it is appropriate to require the Operating Committee to review and approve the confidentiality policies of the Administrator and Processor, upon adoption and on a periodic basis every two years thereafter or whenever changes are made, after which the policies would be publicly posted. As proposed, the policies would have been made available to the Operating Committee every two years or when changes are made.

The Commission believes that requiring the Operating Committee to review and approve these important policies in this manner will help ensure that they are clear, complete, and comply with the Amendments. The Commission believes it is appropriate specifically to require the Operating Committee to affirmatively approve (in addition to ''review'') the policies to ensure that the Operating Committee carefully considers and takes action on them. Requiring robust policies at the Administrator and Processor level, where some of the most sensitive information is generated, classified, and maintained for the Plan, is critical to the effectiveness of the Amendments. The Operating Committee can play an important role in protecting confidential information by carefully reviewing the policies of the Administrator and Processor and ensuring that they are consistent with the principles and procedures established in these Amendments. Finally, the Commission believes that it is appropriate to require the policies and procedures to be made publicly available, which will provide important transparency to market participants and the public about the steps the Processor and Administrator take to protect commercially sensitive information collected on behalf of the Plans. Further, the Commission believes that transparency via public dissemination should be favored to the greatest extent possible, and that when sensitive information can be anonymized or aggregated to reduce its sensitivity, such information should be anonymized and aggregated in accordance with a clear, standardized methodology to be consistently applied by Administrator and Processor. Thus, as revised, the Commission believes that Section 1(d) creates an effective process to develop clear and robust confidentiality policies for the Administrator and Processor, and to periodically update such policies as technology and markets evolve.

B. Definitions: Public Information

In the Notice, the Commission solicited comments on, among other things, whether certain SIP-related information should be considered public and available to be shared outside of the Operating Committee.[52] The Commission further asked whether ''information that is not classified at some level of confidentiality should be considered public and may be shared freely outside of the Operating Committee.'' [53] The Commission also solicited comment on whether Advisory Committee members needed access to sensitive information of substantial commercial and competitive value in order to perform their duties, such as underlying information relied on by Participants when making decisions on funding improvements to the SIP.[54]

In response, one commenter stated that ''[i]nformation that is not classified at some level of confidentiality should be considered public and may be shared freely outside of the Operating Committee. Specific information that [the commenter] believes should be considered public and shared outside of the Operating Committee may include shared Plan revenue information, industry subscriber and quote metrics, Processor transmission metrics and Operating Committee minutes.'' [55] According to the commenter, ''[t]his information provides transparency into the operation of the Plan(s), valuable for making determinations on the efficacy of Plan operations.'' [56] Two commenters supported the adoption of specific policies to specify what information should be made available outside of Executive Sessions or otherwise.[57] One commenter expressed concern about ''the inclusion of the individual views and statements of Covered Persons during a meeting of the Operating Committee as Confidential Information'' and suggested that ''at a minimum, a summary of direction/votes made by Covered Persons should be included in Committee Minutes, which would become public information.'' [58] According to the commenter, ''[w]ithout transparency into the views attributable to individual Covered Persons responsible for directing Plan operations through their role on the Operating Committee, members of the public, as consumers of plan data, would be unable to determine whether those Covered Persons were acting in the best interests of the Plan(s) and were effective in their roles.'' [59] One commenter supported disclosure of audited financial information and data and the use of funds by the Plans.[60] Another commenter stated that ''the public deserves to know how much profits the exchanges make . . . [and] information that is currently non-public about the costs and operations [of the Plans].'' [61]

One commenter expressed concern ''regarding the classification of all contracts between the Operating Committee and its agents as Confidential Information,'' stating that ''anyone with an interest in the Plan(s) should have sufficient transparency into the agents utilized by the Plan(s) to be able to contextualize and understand whether or not a conflict of interest may exist between the Operating Committee and contracted agents.'' [62] According to the commenter, this ''may be a situation in which the Plan(s) allow for the

[50] *Id.*

[51] *Id.*

[52] *See* Notice, *supra* note 6, 85 FR at 2211.

[53] *Id.*

[54] *See id.* at 2212.

[55] TD Ameritrade Letter, *supra* note 30, at 7.

[56] *Id.*

[57] *See* Letter from Jeff Brown, Senior Vice President—Legislative and Regulatory Affairs, Charles Schwab, to Vanessa Countryman, Secretary, Commission, dated February 4, 2020 (''Charles Schwab Letter''), at 3 and RBC Letter, *supra* note 39, at 3.

[58] TD Ameritrade Letter, *supra* note 30, at 5–6.

[59] *Id.*

[60] *See* Charles Schwab Letter, *supra* note 57, at 3.

[61] Letter from Tyler Gellasch, Executive Director, Healthy Markets Association to Vanessa Countryman, Secretary, Commission, dated February 20, 2020 (''Healthy Markets Letter''), at 20.

[62] TD Ameritrade Letter, *supra* note 30, at 6.

flexibility to redact sensitive information from certain documents (*e.g.,* pricing terms and conditions) and allow the classification of such information to remain public.'' [63]

As discussed above regarding the classification of Plan-related information based solely on its content, the Commission believes that public availability of information should be favored to the greatest extent possible while still protecting sensitive information. After considering the comments received in response to the Notice, the Commission believes that this principle extends to certain information discussed by or relied upon by the Participants when making decisions on the administration and operation of the SIPs. Making this information public, so that members of the Advisory Committee and others can review it, will provide Advisors and members of the general public with access to previously unavailable information on the administration and operation of the SIPs, which serve an important public function in the equities market. The SIPs are critical regulatory market infrastructure, authorized by Congress and operated jointly by self-regulatory organizations as a key part of the securities markets, which Congress categorized as ''an important national asset.'' [64] Market participants rely on the SIPs to inform their trading and assure their regulatory compliance efforts. Requiring greater transparency into the Plans' operations should provide market participants and the general public with a more comprehensive understanding of Plan operations, which should, in turn, facilitate their ability to make informed assessments and actively contribute, whether through feedback, input, or otherwise, to the effective governance of the Plans. And classifying the information discussed below as Public Information will facilitate market participants' and the public's ability to track, assess, and contribute to SIP governance and operations and therefore is consistent with the public interest, the protection of investors, and the maintenance of fair and orderly markets.

While the proposed policy defines the term ''Public Information,'' the proposal does not expressly provide that any specific, identifiable information or data relating to plan governance, operations, or administration is public, other than, as an illustrative example, ''any topic discussed during a meeting of the Operating Committee, an outcome of a topic discussed, or a Final Decision of the Operating Committee. . . .'' [65] Defining more information on Plan governance, operations, and administration as ''Public Information,'' while still protecting sensitive information, should strengthen Plan administration and governance by promoting transparency, thereby facilitating review and feedback from market participants and the public. In addition, the Advisory Committee members and other firms and members of the public currently are prevented from seeing much of the underlying information relied on by the Participants when making decisions on funding of and improvements for the SIP. With greater access to information on the Plans' governance, operations, and administration, Advisors will be better able to perform their responsibilities and will have the benefit of feedback from other firms and members of the public to inform their decision-making. The Operating Committee will correspondingly benefit from a valuable source of better informed input.

Thus, the Commission believes that it is appropriate to modify the definition of ''Public Information'' in Section 2(d) to include the following additional items of information: [66]

- The duly approved minutes of the Operating Committee and any subcommittee thereof with detail sufficient to inform the public on matters under discussion and the views expressed thereon (without attribution),[67]
- Plan subscriber and performance metrics, and
- Processor transmission metrics.

With respect to the public availability of the duly approved minutes for each meeting, the Commission is not requiring publicly available minutes to include legally privileged, Restricted, or Highly Confidential Information. Rather, the duly approved minutes generally must reflect, at a minimum, what entity met, the time and date of the meeting, the parties present, the topics discussed and views expressed thereon (without attribution), and the decisions made and votes recorded. Defining this information as ''Public Information'' will facilitate broader awareness of the governance of the critical market infrastructure for which the Participants are responsible under the Plans. In turn, broader awareness of Plan governance can facilitate the ability of market participants and the public to comment and provide input on important matters being considered by the Participants for the SIPs, which ultimately will promote fair and orderly markets and the protection of investors in the public interest to extent their input helps shape future Plan initiatives and strengthen the SIPs on which market participants and the public rely.

Finally, the Commission believes, as supported by the commenter discussed above, that certain core metrics on the Plans' subscribers, performance, and data transmission should be public information in order to promote transparency of the Plans' operation and oversight. The Plans already make such information publicly available, and specifically including it within the definition of Public Information recognizes that fact and ensures that such information, as well as similar information that may be prepared in the future, can continue to be made publicly available.[68]

Public availability of Plan subscriber and performance metrics and Processor transmission metrics affords a limited, basic level of transparency of the key metrics associated with Plan operations, such as number of subscribers by

[63] *Id.* The Commission is not modifying the Amendments to specifically include this requirement, but the Operating Committee could consider this suggestion.

[64] 15 U.S.C. 78k–1(a)(1)(A).

[65] *See* Section 2(d) of the policy as proposed.

[66] Further, the Commission is adding the phrase ''except to the extent covered by (a), (b), or (d)'' to the start of Section 2(c) to reflect that nothing in Section 2(c) can alter what is defined as Restricted, Highly Confidential, or Public. For example, the Operating Committee, a Participant, or an Advisor could not designate as Restricted Information, Highly Confidential Information, or Confidential Information something that falls within the definition of Public Information. The Commission also is modifying the definition of ''Public Information'' under Section 2(d)(vi) concerning ''any information that is otherwise publicly available'' to add the phrase ''except for information made public as a result of a violation of this Policy or any applicable law or regulation'' to clarify that ''otherwise publicly available'' refers to information that is legally and appropriately within the public domain.

[67] The Commission also is making a conforming change to Section 2(c) to reflect this provision by deleting subsection (iii) which, as proposed, stated: ''the minutes of the Operating Committee or any subcommittee thereof unless approved by the Operating Committee for release to the public.''

[68] *See* Metrics published by the Plans, *available at https://www.ctaplan.com/metrics.* Current subscriber metrics publicly disseminated include quarterly statistics on nonprofessional subscribers, professional subscribers, households, quote usage, internal vendors, external vendors, and non-display vendors. Current key operating metrics publicly disseminated by the Plans include statistics on system availability, peak messages (for certain defined periods of time), capacity messages (for certain defined periods of time), capacity versus peak ratios, peak transactions per day, capacity transactions per day, average and median latency, and various percentile latencies. As modified, the Amendments provide that this category of information will be considered Public Information. Accordingly, similar information prepared in the future that falls under these categories will be classified as Public Information.

category, system availability metrics, latency, and other information. Public transparency of this information, some of which already currently occurs, should provide greater transparency into important aspects of the Plans' operation and oversight. As noted above, the SIPs are critical regulatory market infrastructure, operated jointly by self-regulatory organizations providing quote and trade information upon which market participants and the public rely and which Congress categorized as ''an important national asset.'' [69] As market participants rely on the SIPs to inform their trading and assure their regulatory compliance efforts, they have an interest in effective Plan operations and ensuring that the SIPs keep pace with evolving technology, markets, and regulatory developments. Classifying Plan subscriber and performance metrics and Processor transmission metrics as ''Public Information'' will facilitate market participants' and the public's ability to monitor, assess, and contribute to improving SIP operations and the ability of the SIPs to fulfill their purpose as critical market infrastructure as the markets evolve, thereby facilitating the maintenance of fair and orderly markets in the future.

For the reasons discussed throughout this order, the Commission believes that transparency of key Plan information, including duly approved Operating Committee meeting minutes, and performance, subscriber, and transmission metrics, is consistent with the public interest, the protection of investors, and the maintenance of fair and orderly markets.[70]

C. Procedures

1. General Procedures

As discussed above, the Commission believes that it is appropriate to modify the Amendments to require the Administrator and Processor to establish written confidentiality policies, which, among other things, address the safeguarding of confidential information. As a conforming change to Section 3(a)(iii), which requires the Administrator to ensure that documents are properly labeled, the Commission is modifying that provision to include the phrase ''and, if applicable, electronically safeguarded.'' [71] This conforming modification reflects the fact that the Administrator would be required to safeguard electronic documents within its control and/or possession such as by, for example, encrypting them during transmission and/or protecting them with a password or other access control.

2. Procedures for Restricted and Highly Confidential Information

In the Notice, the Commission solicited comments on, among other things, whether commenters believe ''that Participants involved in the operation or governance of each Plan have, by consequence of their position, access to information of substantial commercial and competitive value.'' [72] If so, the Commission asked commenters to consider whether ''certain of that information, including customer-specific financial information, customer-specific audit information, personally identifiable information, and information concerning the intellectual property of Participants or customers, is highly sensitive to such a degree that its possession and use should be more tightly controlled.'' [73]

The Commission asked whether ''any Participant or Advisory Committee member that is directly involved in the management, sale, or development of similar proprietary market data products that may be sold to customers of the SIPs should have access to any customer information from the SIPs'' or whether Operating Committee members, as well as the Administrator, Processor, and auditor ''should be prohibited, unless otherwise required by law, from sharing confidential information with individuals that are not involved with the operation of the Plans and individuals employed by or affiliated with the same entity if such individuals are involved in the management, sale, or development of proprietary data products that are offered separately to a substantially similar customer base, *i.e.,* customers or potential customer of the SIPs.'' [74]

With respect to the Participants' representatives, the Commission sought comment on whether ''Participants' representatives should be subject to restrictions and/or information barriers as part of the confidentiality policy to address their direct or indirect involvement in the development or sale of proprietary data products to SIP customers.'' [75] The Commission further asked for comment on whether ''Participants' access to a list of the Processor's customers as well as information on those customers' data usage and fees paid to the Plans has competitive implications'' and, if so, whether ''the Plans should require recusal in certain circumstances (*e.g.,* during Executive Sessions or Operating Committee meetings) because the potential for misuse of competitively sensitive confidential information is too great.'' [76]

Further, the Commission solicited comment on whether additional protections are needed when ''a Participant is either employed by or affiliated with an entity that offers proprietary data products that are offered for sale to a substantially similar customer base (*i.e.,* customer or potential customers of the SIPs).'' [77] The Commission also requested comment on whether a Participant should be able to share information with other employees and agents, asking whether ''outsourced service providers (including, but not limited to, firms and persons that provide audit services, accounting services, or legal services to the Plans, the Administrator, or the Processor) [should] be subject to additional restrictions, particularly if they are directly or indirectly affiliated with a Participant, the Administrator, the Processor, or any entity that offers separately proprietary data products to a substantially similar customer base, *i.e.,* customers or potential customers of the SIPs.'' [78]

In response to the Notice and requests for comment as to whether the proposed Amendments should be further enhanced, the Commission received comments and input from the Advisory Committee to the Plans, as well as from several other commenters. The Advisory Committee had concerns with the proposed situations in which Highly Confidential and Confidential information may be shared by a

[69] 15 U.S.C. 78k–1(a)(1)(A).

[70] The Plans currently publish information on plan operations, including summaries of the General Sessions from the Operating Committees' quarterly meetings, plan policies, quarterly and monthly performance metrics, pricing schedules, and technical specifications. The Plans also make publicly available certain information on SIP-related revenues, including trade and quote revenue distributed to Participants for Tapes A and B, per trade and quote message revenue (in aggregate) distributed to Participants for Tapes A and B, and revenue earned by fee type for Tapes A and B. This revenue data is updated on a quarterly basis, with a 60 day lag, and is available on the Plans' website at *https://www.ctaplan.com/metrics.*

[71] The Commission also is modifying Section 3(a)(iii) to add the word ''The'' before the word ''Administrator.''

[72] Notice, *supra* note 6, 85 FR at 2211.

[73] *Id.*

[74] *Id.*

[75] *Id.*

[76] *Id.* While the Commission is not modifying these Amendments to require recusal, it is, as discussed below, modifying provisions concerning the disclosure of Highly Confidential Information and Confidential Information to others. In addition, the Commission separately is approving modified amendments to address the Plans' conflicts of interest policies, which, as approved, do provide for recusal in certain circumstances. *See* Securities Exchange Act Release No. 88823 (May 6, 2020).

[77] Notice, *supra* note 6, 85 FR at 2211.

[78] *Id.* at 2212.

Participant representative and Advisors. The Advisory Committee explained that:

Under the proposed policy, Highly Confidential and Confidential information may each be shared by a representative of a Participant 'to other employees or agents of the Participant or its affiliates only as needed for such Covered Person to perform his or her function on behalf of the Participant, as reasonably determined by the Covered Person.' We believe this standard is insufficient. The rationale that information may be shared 'to perform his or her function on behalf of the Participant' assumes that the representative's role on the committee is to further the interests of the Participant rather than the plan—this strikes at the heart of the conflict of interest inherent in the governance of the plan. Such information should only be shared to further the interests of the plan, and such sharing should at least be disclosed to and potentially authorized by the Operating Committee. In situations where the Participant representative is subject to a conflict due to their own responsibility regarding the sale of proprietary exchange data, the policy should limit access to such confidential information by the Participant representative.[79]

One commenter stated that the proposed policy should include ''requirements to prevent the sharing of information with a competitive value to those individuals who have direct responsibility for the management, sale, or development of proprietary data products offered separately.'' [80] The commenter recommended that control procedures for restricted, highly sensitive or confidential information ''should be explicitly defined'' and should include ''required logging of the sharing of Restricted and Highly Confidential Information,'' the ''required use of common logical security controls'' such as encryption and password protection, and ''standardized procedures for the redaction/aggregation/anonymization of information.'' [81] The commenter also stated that with respect to Restricted and Highly Confidential Information, the policy should not allow for the automatic sharing of information between the Administrator and Processor or the Participant and its employees or agents unless required for performance of responsibilities as required by the Plans; the commenter cited customer audit information as an example.[82] With respect to sharing Restricted Information, the commenter also stated its belief that if unredacted information is shared in Executive Session, ''the Administrator should also ensure that no parties with a conflict of interest are present in such session, or if so, should develop procedures to require that individual's recusal to ensure they do not receive information or significant competitive value.'' [83] With respect to the classification of information or data generated or discussed by the Operating Committee, the commenter stated its belief that the proposal should give non-SRO members information available in executive session, because ''[n]on-SRO members may provide valuable feedback and insight into decisions made with respect to an Administrator, Processor, auditor, or third-party service provider.'' [84] An additional commenter stated that ''if the Administrator function is staffed by personnel of one of the Participant exchanges, there must be a separation of functions'' and those personnel ''should not be employed by the Participant's proprietary data business line, and they should not share with the Participant's proprietary data business line confidential SIP information obtained in their role as administrator.'' [85]

After considering the comments received, the Commission believes that it is appropriate to modify the procedures concerning Restricted Information and Highly Confidential Information. Given that Restricted Information and Highly Confidential Information both contain highly sensitive and entity-specific information, the Commission believes that Covered Persons in possession of such information should protect that information in a substantially similar way by not disclosing it to others, including Agents and outside affiliated persons, unless an exception exists.[86]

The parties involved in the governance of the Plans and the SIP are privy to confidential and proprietary information generated in connection with the Plans. The Commission believes it is important to protect the confidentiality of certain SIP-related information because some Participant exchanges or their affiliates have a dual role as both an SRO jointly responsible for the operation of the Plans, on one hand, and, on the other hand, as part of a publicly held company that offers proprietary data products and connectivity services. As a consequence of this dual role, an exchange's representative on the Plans' Operating Committee may have conflicting responsibilities both to the exchange's proprietary data business as well as to the SIP. These potential conflicts of interest are of particular concern because the proprietary data products offered by an exchange generate revenue in addition to the revenue the exchange receives from the Plans.

Allowing sensitive Plan-related information to be shared with and disclosed to non-Plan personnel of the Participant—particularly those responsible for the Participant's own proprietary data business that competes with the SIP—could create a potential conflict. The Commission is concerned about the potential for such sharing as non-Plan personnel likely would have no need to know such information as they have no responsibilities to the Plan. Further, if Restricted Information or Highly Confidential Information is disclosed to those persons, such persons could use the competitively valuable non-public information for purposes unrelated to, and potentially inconsistent with, Plan business. The Commission believes that Restricted Information and Highly Confidential Information generated in connection with the operation of the Plans and its SIP should be retained in the confidences of Plan and SIP personnel not used in ways that could potentially harm the interests of the Plan to the extent the information is used to further the competitive advantage of a Participant.

Therefore, the Commission is modifying Section 3(b)(i), which says that Restricted Information will be kept in confidence by the Administrator and Processor, to begin that subsection with the following: ''Except as provided below, Covered Persons in possession of Restricted Information are prohibited from disclosing it to others, including Agents. This prohibition does not apply to disclosures to the staff of the SEC or as otherwise required by law or to other Covered Persons as expressly provided for by this Policy.'' [87] The change is intended to assure that the Administrator and Processor, who are required by the policy to ''[keep] in confidence'' Restricted Information, do not disclose that information to outside persons who may be directly or indirectly affiliated with them,

[79] Advisory Committee Letter, *supra* note 29, at 2.

[80] TD Ameritrade Letter, *supra* note 30, at 3.

[81] *Id.* at 2–3. These detailed suggestions are beyond the scope of these Amendments, but the Operating Committee could consider them in the appropriate context.

[82] TD Ameritrade Letter, *supra* note 30, at 3.

[83] *Id.*

[84] *Id.* at 6–7.

[85] Charles Schwab Letter, *supra* note 57, at 2–3.

[86] *See* Section 2(a) of the Amendments, defining Restricted Information (as including ''highly sensitive customer-specific'' information as well as ''Personal Identifiable Information'') and Highly Confidential Information (as including ''highly sensitive Participant-specific, customer-specific, individual-specific, or otherwise sensitive information'').

[87] In addition, the Commission is modifying Section 3(b)(i)(3) to add ''staff of the'' in front of ''SEC'' to conform to Section 3(b)(i)(1).

including employees, agents, service providers, and subcontractors. The Commission believes it would be inconsistent with the ''[keep] in confidence'' standard for the Administrator or Processor to disclose Restricted Information to affiliated persons, and is thus modifying the Amendments to state so explicitly. The Commission believes that Restricted Information, including personally identifiable information, customer-specific financial information, and audit information, is highly sensitive to such a degree that its possession and use should be tightly controlled.

In addition, the Commission is modifying Section 3(c)(i)(1) to be parallel to the Section 3(b)(i)(1) on Restricted Information. As modified, Section 3(c)(i)(1) reads: ''Except as provided below, Covered Persons in possession of Highly Confidential Information are prohibited from disclosing it to others, including Agents. This prohibition does not apply to disclosures to the staff of the SEC or as otherwise required by law or to other Covered Persons authorized to receive it.'' The Commission believes that the proposed Amendments' restrictions on the disclosure of Highly Confidential Information to an Executive Session of the Operating Committee or to the Legal Subcommittee reflect the highly sensitive and commercially valuable nature of that information. In light of the value and sensitivity of such information, the Commission shares commenters' concerns about circumstances in which a Participant's representative, who has access to the information, may be involved in the development or sale of proprietary data products to a customer base similar to that of SIP customers. Thus, the Commission believes that the use and possession of Highly Confidential Information should be tightly controlled to prevent a Participant's representative from disclosing such information to affiliated persons.

3. Procedures for Confidential Information

Most of the questions and potential modifications in the Notice discussed above for Restricted Information and Highly Confidential Information also relate to Confidential Information. In addition, in the Notice, the Commission also solicited comments on, among other things, whether ''commenters believe that the Plans should require all Participants and other Covered Persons to establish, maintain, and enforce policies and procedures to safeguard confidential and proprietary information received via their participation in the Plans and to prevent its misuse by such Participants or entities controlling, controlled by, or under common control with such Participants.'' [88] More specifically, the Commission asked whether commenters ''believe that the proposed provisions allowing Participants to disclose confidential and highly confidential information to other employees or agents of the Participant or its affiliates as needed as they reasonably determine'' are appropriate.[89] Among other things, the Commission also solicited comments on whether Participants' representatives should be subject to restrictions and/or information barriers to address their direct or indirect involvement in the development or sale of proprietary data products to SIP customers.[90]

In response to the Notice, including the Commission's solicitation of comments on these issues and on whether the proposed Amendments should be further enhanced, the Advisory Committee stated that ''Advisors may only share Confidential Information to solicit industry feedback and then only if specifically authorized by the Operating Committee'' and recommended that there ''is no reason for Participant representatives and Advisors to have different standards for sharing information—in each case it should only be to further the interests of the plan, and the standard for determining that threshold should be equivalent.'' [91] The Advisory Committee further recommended that the provisions protecting Confidential Information ''should extend to any information obtained by outsourced service providers in order to ensure that information learned by such service providers is only shared with those individuals of the Operating Committee required to receive such information and in furtherance of the service provider's engagement and the plan.'' [92]

As discussed above in the context of Restricted Information and Highly Confidential Information, the Advisory Committee also objected to the proposed standard that would allow a Participant's representative to share Highly Confidential Information and Confidential Information ''to other employees or agents of the Participant or its affiliates only as needed for such Covered Person to perform his or her function on behalf of the Participant, as reasonably determined by the Covered Person.'' [93] Believing that standard to be ''insufficient,'' the Advisory Committee criticized that provision as assuming ''that the representative's role on the committee is to further the interests of the Participant rather than the plan,'' which the Advisory Committee said ''strikes at the heart of the conflict of interest inherent in the governance of the plan.'' [94] The Advisory Committee recommended that confidential information ''should only be shared to further the interests of the plan, and such sharing should at least be disclosed to and potentially authorized by the Operating Committee'' and where a Participant's representative ''is subject to a conflict due to their own responsibility regarding the sale of proprietary exchange data, the policy should limit access to such confidential information by the Participant representative.'' [95]

One commenter agreed that the standard should be the same for all Covered Persons, and that any confidential information should be shared ''as reasonably determined to perform [the Covered Person's] function.'' [96] Another commenter believed that control procedures need to be sufficient to prevent disclosure to ''individuals without specific reason to receive such information to address their responsibilities according to the Plan(s) requirements.'' [97] That commenter recommended that the proposed policy include ''requirements to prevent the sharing of information with competitive value to those individuals who have direct responsibility for the management, sale, or development of proprietary data

[88] Notice, *supra* note 6, 85 FR at 2211.

[89] *Id.*

[90] *See id.*

[91] Advisory Committee Letter, *supra* note 29, at 2.

[92] *Id.*

[93] *Id.*

[94] *Id.*

[95] *Id.*

[96] Charles Schwab Letter, *supra* note 57, at 3. Another comment received in response to the Governance Notice recommended that the confidentiality policy standards should be the same for both the SROs and non-SROs and further suggested that for the non-SRO members to be able to effectively engage with the Operating Committee, they should be able to exercise reasonable discretion in sharing with others within their firm information that may be relevant to policy issues and proposals being considered by the SROs. *See* Letter from John Ramsay, Chief Market Policy Officer, Investors Exchange, LLC, to Vanessa Countryman, Secretary, Commission, dated March 4, 2020 at 6. A separate comment received in response to the Governance Notice thought that the proposed Amendments would improve the handling of confidential information and are designed both to protect confidential information from misuse and to facilitate the sharing of confidential information with the Advisory Committee. *See* Letter from Patrick Sexton, EVP, General Counsel and Corporate Secretary, Cboe Global Markets, Inc., to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 at 5.

[97] TD Ameritrade Letter, *supra* note 30, at 2.

products offered separately.'' [98] The commenter further recommended that, given the potential conflicts of interests involved and the difficulties associated with mitigating such conflicts, ''Participants should be explicitly prohibited from disclosing restricted, highly confidential and confidential information to other employees or agents of the Participant or its affiliates unless authorized to do so on a case-by-case basis from the Operating Committee, and only if required to do so for such individual to perform his or her function on behalf of the Plan, unless such disclosure is required by law.'' [99]

After considering the comments received, the Commission believes it is appropriate to modify the Amendments concerning the procedures for protecting Confidential Information. First, the Commission is modifying Section 3(d)(i), which currently allows Covered Persons to disclose Confidential Information to other Covered Persons. As discussed above, the Commission has expanded the definition of Covered Persons to include affiliates and employees, to whom disclosing Confidential Information might not be appropriate. Accordingly, the Commission is modifying Section 3(d)(i) to provide that a Covered Person ''may only disclose Confidential Information to other persons who need to receive such information to fulfill their responsibilities to the Plan.'' In addition, disclosure will continue to be permitted to staff of the SEC, as authorized by the Operating Committee, or as otherwise required by law.[100] For the same reasons discussed above with respect to Restricted Information and Highly Confidential Information, the Commission shares commenters' concerns about circumstances in which a Participant's representative may be involved in the development or sale of proprietary data products to a customer base similar to that of SIP customers. If the Participant's representative straddles both roles simultaneously, or provides Confidential Information to other employees of the Participant, the Confidential Information can be used to benefit the Participant's proprietary data business in a manner contrary to the interests of the Plans.

Similarly, the Commission is modifying Section 3(d)(iv), which applies to the sharing of information between a Participant's representative and other employees or agents of the Participant. As proposed, the provision would allow a Participant's representative to disclose Confidential Information (and Highly Confidential Information) ''to other employees or agents of the Participant or its affiliates only as needed for such Covered Person to perform his or her function on behalf of the Participant, as reasonably determined by the Covered Person.'' The Commission is striking the phrase ''Participant, as reasonably determined by the Covered Person'' and the phrase ''and Highly Confidential Information'' such that the revised provision will provide that ''A Covered Person that is a representative of a Participant may be authorized by the Operating Committee to disclose particular Confidential Information to other employees or agents of the Participant or its affiliates only in furtherance of the interests of the Plan as needed for such Covered Person to perform his or her function on behalf of the Plan.''

Without this change, the Commission agrees with commenters that the protections in the proposed policy would be insufficient to adequately address circumstances in which a Participant's representative may be involved in the development or sale of proprietary data products to a customer base similar to that of SIP customers. The Commission believes that an exchange's commercial interests in its proprietary data businesses and its potential access to confidential information generated by the Plans and their SIP create potential conflicts of interest, which have the potential to inappropriately influence decisions as to the Plans' operation and thereby impede the Plans' ability to ensure the ''prompt, accurate, reliable, and fair collection, processing, distribution and publication of information with respect to quotations for and transactions in such securities and the fairness and usefulness of the form and content of such information.'' [101] Limiting the disclosure of Confidential Information to situations where the disclosure is reasonably necessary to further the interests of the Plan in the performance of the person's role with the Plans should help mitigate the conflict by protecting against misuse of commercially valuable non-public information.

Further, the Commission is making a change to conform Section 3(d)(iii) to the modifications it made to Section 3(d)(iv) so that both Advisors and Participants' representatives will be subject to the same standard with respect to disclosing Plan-related Confidential Information. As modified, Advisors may be authorized by the Operating Committee to disclose particular Confidential Information ''only in furtherance of the interests of the Plan. . . .'' Advisors will still be required to take any steps requested by the Operating Committee to prevent further dissemination of that Confidential Information. The Commission agrees with commenters that the standard for sharing Confidential Information should be the same for Covered Persons that are representatives of a Participant as well as Advisors, and be limited to situations in which the disclosure is made to further the interests of the Plan. Regardless of the identity of the person in possession of Confidential Information, the Commission believes that information that is labeled as Confidential Information should be protected to the same extent by all Covered Persons. If such information is appropriate to share more broadly, then it should be classified as Public Information. The Commission is therefore modifying the Amendments so that members of the Advisory Committee are treated like Participants' representatives in this regard.

4. Unauthorized Disclosures

In the Notice, the Commission solicited comment on remedies for disclosures inconsistent with the proposed policy. As proposed, the policy provides that unauthorized disclosures of Highly Confidential Information, as determined by the Operating Committee acting by majority vote, will be subject to an ''appropriate remedy'' that could include a letter of complaint against a Participant's representative, or the removal of an Advisor from the Advisory Committee.[102] With respect to Confidential Information, the policy provides that unauthorized disclosure will be self-reported to the Chair of the Operating Committee and disclosed in the minutes. The Commission asked, among other things, whether these

[98] *Id.* at 3.

[99] The commenter also stated that if disclosure is required by law, the Covered Person should be required to first notify the Operating Committee so as to provide it with an opportunity to redact information or to dispute the requirement to provide it in its entirety. *See id.* at 8. The Commission is not modifying the Amendments to specifically include this requirement, but the Operating Committee could consider this suggestion.

[100] The Commission is making non-substantive wording changes to the last sentence of Section 3(d)(i) to accommodate the revisions to the beginning of that sentence. Specifically, it is separating out the second part of the sentence into a stand-alone sentence that continues to provide that: ''A Covered Person also may disclose Confidential Information to the staff of the SEC, as authorized by the Operating Committee as described below, or as may be otherwise required by law.''

[101] 15 U.S.C. 78k–1(c)(1)(B).

[102] *See* Section 3(c)(ii).

proposed remedies are sufficient to deter unauthorized disclosure, or whether any other consequences of such disclosure should be provided.[103] The Commission also asked whether commenters believe that ''appropriate remedies for Participants and Advisors should differ, or should potential remedies for Participants that disclose confidential information also include the possibility of removal of that Participant from the Operating Committee.'' [104]

In response, one commenter stated that ''[r]emedies for unauthorized disclosure of any confidential information, regardless of classification, should be the same irrespective of the nature of the Covered Person'' and that ''breaches by a Covered Person should be disclosed to the Operating Committee, recorded, and reviewed by the Operating Committee for determination upon majority vote of an appropriate remedy, which should include remedies up to and including: required recusal of future discussions of related confidential topics, or removal from any role with respect to Plan Activities.'' [105] According to the commenter, ''[a]ny reviews of votes regarding a breach should require recusal of such Covered Person who caused the breach.'' [106] Another commenter believes that a Participant representative should be removed from the Operating Committee if she is in violation of the Confidentiality Policy, just as an Advisory Committee member can be removed as described in the Amendments.[107]

After considering the comments received in response to the Notice, the Commission believes that it is appropriate to modify Section 3(d)(vi) to specifically provide a process for a Covered Persons to report potential unauthorized disclosures to the Chair of the Operating Committee so that the Amendments do not rely solely on self-reporting of unauthorized disclosures. Specifically, the Commission is adding the following new sentence to the beginning of Section 3(d)(vi): ''A person that has reason to believe that Confidential Information has been disclosed by another without the authorization of the Operating Committee or otherwise in a manner inconsistent with this Policy may report such potential unauthorized disclosure to the Chair of the Operating Committee.'' [108] The Participants in their submission state that the proposal addresses unauthorized disclosure insofar as a Covered Person who discloses Confidential Information without the authorization of the Operating Committee would be obligated to self-report such disclosure to the Chair of the Operating Committee, which would then be recorded in the minutes of the Operating Committee.[109] The Commission believes that relying on self-reporting is insufficient. Rather, the Commission believes that providing a formal mechanism for any Covered Person as well as others to report potential unauthorized disclosures will assure such individuals that they can bring such instances to the attention of the leadership of the Operating Committee.[110] This modification is intended to make clear that persons who have reason to believe that Confidential Information has been disclosed by another without the authorization of the Operating Committee or otherwise in a manner inconsistent with this Policy may report such potential unauthorized disclosure to the Chair of the Operating Committee. Thus, the Commission believes that this modification will promote compliance with persons tasked with protecting the confidentiality of Plan-related information and, to the extent it results in unauthorized disclosures being found and disclosed in the minutes, it will provide transparency into overall compliance with the policy.

IV. Commission Findings

For the reasons discussed throughout, the Commission finds that the proposed Amendments to the Plans, as modified by the Commission, are consistent with the requirements of the Act and the rules and regulations thereunder, and in particular, Section 11A of the Act [111] and Rule 608 [112] thereunder in that they are necessary or appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanisms of, a national market system.

Section 11A of the Act [113] sets forth Congress' finding that it is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to ensure the prompt, accurate, reliable and fair collection, processing, distribution, and publication of information with respect to quotations for and transactions in such securities and the fairness and usefulness of the form and content of such information. The Commission believes that the confidentiality policy, as modified, furthers these goals set forth by Congress.

V. Conclusion

It is therefore ordered, pursuant to Section 11A of the Act,[114] and the rules thereunder, that the proposed Amendments to the CTA and CQ Plans (File No. SR–CTA/CQ–2019–04), as modified by the Commission, are approved.

By the Commission.

J. Matthew DeLesDernier,

Assistant Secretary.

Exhibit A

Marked to Show Changes From The Proposal

The Commission's additions are *italicized;* deletions are [bracketed].

CTA Confidentiality Policy

1. Purpose and Scope

a. The purpose of this Confidentiality Policy (the ''Policy'') is to provide guidance to the Operating and Advisory Committees of the CTA Plan (the ''Plan''), and all Subcommittees thereof, regarding the confidentiality of any data or information (in physical or electronic form) generated, accessed or transmitted to the Operating Committee, as well as discussions occurring at a meeting of the Operating Committee or any Subcommittee.

b. This Policy applies to all representatives of the Participants,

[103] *See* Notice, *supra* note 6, 85 FR at 2212.

[104] *Id.*

[105] TD Ameritrade Letter, *supra* note 30, at 10 (internal quotation marks omitted).

[106] *Id.*

[107] *See* Charles Schwab Letter, *supra* note 57, at 3. The Commission is not modifying the Amendments to remove a Participant from the Operating Committee in the manner suggested by the commenter. The Participants, as SROs, have legal obligations and responsibilities under the Act, including with regard to operating the Plans. *See* 15 U.S.C. 78k-1(a)(3)(B). Requiring their removal from the Operating Committee would impede their ability to fulfil their statutory requirements.

[108] In light of the new first sentence, the Commission is making a conforming change to the second sentence of Section 3(d)(vi) to begin with the phrase ''In addition.''

[109] *See* Notice, *supra* note 6, 85 FR at 2210.

[110] This new provision supplements the proposed provisions that require self-reporting by a Covered Person in breach of the policy and the recording of such breaches in the minutes of the Operating Committee, neither of which the Commission is modifying. The Commission is modifying Section 3(d)(vi) to add the words ''self-reported'' to make it clear that the proposed provisions that require the name of the self-reporting Participant to be identified in the minutes do not apply to the Commission's modification that lets any person report such potential unauthorized disclosure to the Chair of the Operating Committee. The Operating Committee may, at its discretion, choose to put in place an appropriate process to review such reports of potential unauthorized disclosures.

[111] 15 U.S.C. 78k–1.

[112] 17 CFR 240.608.

[113] 15 U.S.C. 78k–1(c)(1)(B).

[114] 15 U.S.C. 78k–1.

Pending Participants, and the CTA Administrator and Processor (''Administrator and Processor''); *affiliates, employees, and* agents of the Operating Committee, *a Participant, a Pending Participant, the Administrator, and the Processor,* including, but not limited to, attorneys, *auditors,* advisors, accountants, contractors or subcontractors (''Agents''); any third parties invited to attend meetings of the Operating Committee or Plan subcommittees; and all members of the Advisory Committee *and their employers* (collectively, ''Covered Persons''). Covered Persons do not include staff of the Securities and Exchange Commission (''SEC''). All Covered Persons must adhere to the principles set out in this Policy *and all Covered Persons that are natural persons may not receive Plan data and information until they affirm in writing that they have read this Policy and undertake to abide by its terms.*

c. *Covered Persons* [The Administrator and Processor]may not disclose Restricted, Highly Confidential, or Confidential information except as consistent with this Policy and directed by the Operating Committee.

d. The Administrator and Processor will establish written confidential information policies that provide for the protection of information under their control *and the control of their Agents, including policies and procedures that provide systemic controls for classifying, declassifying, redacting, aggregating, anonymizing, and safeguarding information,* that is in addition to, and not less than, the protection afforded herein. Such policies will be *reviewed and approved by the Operating Committee, publicly posted, and* made available to the Operating Committee for review *and approval* every two years *thereafter* or when changes are made, whichever is sooner.

e. Information will be classified solely based on its content.

2. Definitions

a. ''Restricted Information'' is highly sensitive customer-specific financial information, customer-specific audit information, other customer financial information, and Personal Identifiable Information (''PII'').

b. ''Highly Confidential Information'' is[: (i) any data or information shared in an Executive Session or that would otherwise qualify for confidential treatment pursuant to the Plan's Executive Session Policy; and (ii)] any [other]highly sensitive Participant-specific, customer-specific, individual-specific, or otherwise sensitive information relating to the Operating Committee, Participants, or customers that is not otherwise Restricted Information. Highly Confidential Information includes: A Participant's contract negotiations with the Processor or Administrator; personnel matters; information concerning the intellectual property of Participants or customers; and any document subject to the Attorney-Client Privilege or Work Product Doctrine.

c. ''Confidential Information'' is*, except to the extent covered by (a), (b), or (d):* (i) any non-public data or information designated as Confidential by a majority vote of the Operating Committee; (ii) any document generated by a Participant or Advisor and designated by that Participant or Advisor as Confidential; *and* (iii) [the minutes of the Operating Committee or any subcommittee thereof unless approved by the Operating Committee for release to the public; and (iv)] the individual views and statements of Covered Persons and SEC staff disclosed during a meeting of the Operating Committee or any subcommittees thereunder.

d. ''Public Information'' is: (i) any information that is not either Restricted Information or Highly Confidential Information or that has not been designated as Confidential Information; (ii) any confidential information that has been approved by the Operating Committee for release to the public; [or](iii) *the duly approved minutes of the Operating Committee and any subcommittee thereof with detail sufficient to inform the public on matters under discussion and the views expressed thereon (without attribution); (iv) Plan subscriber and performance metrics; (v) Processor transmission metrics; and (vi)* any information that is otherwise publicly available*, except for information made public as a result of a violation of this Policy or any applicable law or regulation.* Public Information includes, but is not limited to, any topic discussed during a meeting of the Operating Committee, an outcome of a topic discussed, or a Final Decision of the Operating Committee, as defined below.

e. A ''Final Decision of the Operating Committee'' is an action or inaction of the Operating Committee as a result of the vote of the Operating Committee, but will not include the individual votes of a Participant.

f. The ''Operating Committee'' consists of the Participants, Pending Participants, Administrator and Processor, and designated Agents.

g. An ''Executive Session'' of the Operating Committee consists of the Participants, Administrator and Processor and designated Agents.

h. The ''Advisory Committee'' consists of any individual selected by the Operating Committee or a Plan Participant as an advisor to the Operating Committee.

i. The ''Legal Subcommittee'' of the Operating Committee consists of the Participants, Administrator and Processor and Legal Counsel.

3. Procedures

a. General

i. The Administrator and Processor will be the custodians of all documents discussed by the Operating Committee and will be responsible for maintaining the classification of such documents pursuant to this Policy.

ii. The Administrator may, under delegated authority, designate documents as Restricted, Highly Confidential, or Confidential, which will be determinative unless altered by a majority vote of the Operating Committee.

iii. *The* Administrator will ensure that all Restricted, Highly Confidential, or Confidential documents are properly labeled *and, if applicable, electronically safeguarded.*

iv. All contracts between the Operating Committee and its Agents shall require Operating Committee information to be treated as Confidential Information that may not be disclosed to third parties, except as necessary to effect the terms of the contract or as required by law, and shall incorporate the terms of this Policy, or terms that are substantially equivalent or more restrictive, into the contract.

b. Procedures Concerning Restricted Information

i. *Except as provided below, Covered Persons in possession of Restricted Information are prohibited from disclosing it to others, including Agents. This prohibition does not apply to disclosures to the staff of the SEC or as otherwise required by law, or to other Covered Persons as expressly provided for by this Policy.* Restricted Information will be kept in confidence by the Administrator and Processor and will not be disclosed to the Operating Committee or any subcommittee thereof, or during Executive Session, or the Advisory Committee, except as follows:

1. If the Administrator determines that it is appropriate to share a customer's financial information with the Operating Committee or a subcommittee thereof, the Administrator will first anonymize the information by redacting the customer's name and any other information that

may lead to the identification of the customer.

2. The Administrator may disclose the identity of a customer that is the subject of Restricted Information in Executive Session only if the Administrator determines in good faith that it is necessary to disclose the customer's identity in order to obtain input or feedback from the Operating Committee or a subcommittee thereof about a matter of importance to the Plan. In such an event, the Administrator will change the designation of the information at issue from ''Restricted Information'' to ''Highly Confidential Information,'' and its use will be governed by the procedures for Highly Confidential Information in paragraph (c) below.

3. The Administrator may share Restricted Information related to any willful, reckless or grossly negligent conduct by a customer discovered by the Administrator with the UTP Administrator or with the *staff of the* SEC, as appropriate, upon majority vote of the Operating Committee in Executive Session, provided that, in any report by the Administrator during Executive Session related to such disclosure, the Administrator anonymizes the information related to the wrongdoing by removing the names of the party or parties involved, as well as any other information that may lead to the identification of such party or parties.

c. Procedures Concerning Highly Confidential Information

i. Disclosure of Highly Confidential Information:

1. *Except as provided below, Covered Persons in possession of Highly Confidential Information are prohibited from disclosing it to others, including Agents. This prohibition does not apply to disclosures to the staff of the SEC or as otherwise required by law, or to other Covered Persons authorized to receive it.* Highly Confidential Information may be disclosed only in Executive Session of the Operating Committee or to the Legal Subcommittee.

2. Highly Confidential Information may be disclosed to the staff of the SEC, unless it is protected by the Attorney-Client Privilege or the Work Product Doctrine. Any disclosure of Highly Confidential Information to the staff of the SEC will be accompanied by a FOIA Confidential Treatment request.

3. Apart from the foregoing, the Operating Committee has no power to authorize any other disclosure of Highly Confidential Information.

ii. In the event that a Covered Person is determined by a majority vote of the Operating Committee to have disclosed Highly Confidential Information, the Operating Committee will determine the appropriate remedy for the breach based on the facts and circumstances of the event. For the representatives of a Participant, remedies include a letter of complaint submitted to the SEC, which may be made public by the Operating Committee. For a member of the Advisory Committee, remedies include removal of that member from the Advisory Committee.

d. Procedures Concerning Confidential Information

i. Confidential Information may be disclosed to the Operating Committee, any subcommittee thereof, and the Advisory Committee. A Covered Person *may only disclose Confidential Information to other persons who need to receive such information to fulfill their responsibilities to the Plan. A Covered Person also may disclose Confidential Information to* [will not disclose Confidential Information to any individual that is not either a Covered Person or a member of]the staff of the SEC, [except]*as authorized by* [with authorization of]the Operating Committee as described below, or as may be otherwise required by law.

ii. The Operating Committee or a subcommittee thereof may authorize the disclosure of Confidential Information by an affirmative vote of the number of members that represent a majority of the total number of members of the Operating Committee or subcommittee. Notwithstanding the foregoing, the Operating Committee will not authorize the disclosure of Confidential Information that is generated by a Participant or Advisor and designated by that Participant or Advisor as Confidential, unless such Participant or Advisor consents to the disclosure.

iii. Members of the Advisory Committee may be authorized by the Operating Committee to disclose particular Confidential Information *only in furtherance of the interests of the Plan,* to enable them to consult with industry representatives or technical experts, provided that the Member of the Advisory Committee takes any steps requested by the Operating Committee to prevent further dissemination of that Confidential Information, including providing the individual(s) consulted with a copy of this policy and requesting that person to maintain the confidentiality of such information in a manner consistent with this policy.

iv. A Covered Person that is a representative of a Participant may *be authorized by the Operating Committee to* disclose *particular* Confidential Information [and Highly Confidential Information]to other employees or agents of the Participant or its affiliates only *in furtherance of the interests of the Plan* as needed for such Covered Person to perform his or her function on behalf of the *Plan*[Participant, as reasonably determined by the Covered Person]. A copy of this policy will be made available to recipients of such information who are employees or agents of a Participant or its affiliates that are not Covered Persons, who will be required to abide by this policy.

v. A Covered Person may disclose their own individual views and statements that may otherwise be considered Confidential Information without obtaining authorization of the Operating Committee, provided that in so disclosing, the Covered Person is not disclosing the views or statements of any other Covered Person or Participant that are considered Confidential Information.

vi. *A person that has reason to believe that Confidential Information has been disclosed by another without the authorization of the Operating Committee or otherwise in a manner inconsistent with this Policy may report such potential unauthorized disclosure to the Chair of the Operating Committee. In addition, a* [A]Covered Person that discloses Confidential Information without the authorization of the Operating Committee will report such disclosure to the Chair of the Operating Committee. Such *self-reported* unauthorized disclosure of Confidential Information will be recorded in the minutes of the meeting of the Operating Committee and will contain: (a) The name(s) of the person(s) who disclosed such Confidential Information, and (b) a description of the Confidential Information disclosed. The name(s) of the person(s) who disclosed such Confidential Information will also be recorded in any publicly available summaries of Operating Committee minutes.

* * * * *

CQ Confidentiality Policy

1. Purpose and Scope

a. The purpose of this Confidentiality Policy (the ''Policy'') is to provide guidance to the Operating and Advisory Committees of the CQ Plan (the ''Plan''), and all Subcommittees thereof, regarding the confidentiality of any data or information (in physical or electronic form) generated, accessed or transmitted to the Operating Committee, as well as discussions occurring at a meeting of the Operating Committee or any Subcommittee.

b. This Policy applies to all representatives of the Participants,

Pending Participants, and the CQ Administrator and Processor (''Administrator and Processor''); *affiliates, employees, and* agents of the Operating Committee, *a Participant, a Pending Participant, the Administrator, and the Processor,* including, but not limited to, attorneys, *auditors,* advisors, accountants, contractors or subcontractors (''Agents''); any third parties invited to attend meetings of the Operating Committee or Plan subcommittees; and all members of the Advisory Committee *and their employers* (collectively, ''Covered Persons''). Covered Persons do not include staff of the Securities and Exchange Commission (''SEC''). All Covered Persons must adhere to the principles set out in this Policy *and all Covered Persons that are natural persons may not receive Plan data and information until they affirm in writing that they have read this Policy and undertake to abide by its terms.*

c. *Covered Persons* [The Administrator and Processor]may not disclose Restricted, Highly Confidential, or Confidential information except as consistent with this Policy and directed by the Operating Committee.

d. The Administrator and Processor will establish written confidential information policies that provide for the protection of information under their control *and the control of their Agents, including policies and procedures that provide systemic controls for classifying, declassifying, redacting, aggregating, anonymizing, and safeguarding information,* that is in addition to, and not less than, the protection afforded herein. Such policies will be *reviewed and approved by the Operating Committee, publicly posted, and* made available to the Operating Committee for review *and approval* every two years *thereafter* or when changes are made, whichever is sooner.

e. Information will be classified solely based on its content.

2. Definitions

a. ''Restricted Information'' is highly sensitive customer-specific financial information, customer-specific audit information, other customer financial information, and Personal Identifiable Information (''PII'').

b. ''Highly Confidential Information'' is[: (i) any data or information shared in an Executive Session or that would otherwise qualify for confidential treatment pursuant to the Plan's Executive Session Policy; and (ii)] any [other]highly sensitive Participant-specific, customer-specific, individual-specific, or otherwise sensitive information relating to the Operating Committee, Participants, or customers that is not otherwise Restricted Information. Highly Confidential Information includes: A Participant's contract negotiations with the Processor or Administrator; personnel matters; information concerning the intellectual property of Participants or customers; and any document subject to the Attorney-Client Privilege or Work Product Doctrine.

c. ''Confidential Information'' is*, except to the extent covered by (a), (b), or (d):* (i) any non-public data or information designated as Confidential by a majority vote of the Operating Committee; (ii) any document generated by a Participant or Advisor and designated by that Participant or Advisor as Confidential; *and* (iii) [the minutes of the Operating Committee or any subcommittee thereof unless approved by the Operating Committee for release to the public; and (iv)] the individual views and statements of Covered Persons and SEC staff disclosed during a meeting of the Operating Committee or any subcommittees thereunder.

d. ''Public Information'' is: (i) any information that is not either Restricted Information or Highly Confidential Information or that has not been designated as Confidential Information; (ii) any confidential information that has been approved by the Operating Committee for release to the public; [or](iii) *the duly approved minutes of the Operating Committee and any subcommittee thereof with detail sufficient to inform the public on matters under discussion and the views expressed thereon (without attribution); (iv) Plan subscriber and performance metrics; (v) Processor transmission metrics; and (vi)* any information that is otherwise publicly available*, except for information made public as a result of a violation of this Policy or any applicable law or regulation.* Public Information includes, but is not limited to, any topic discussed during a meeting of the Operating Committee, an outcome of a topic discussed, or a Final Decision of the Operating Committee, as defined below.

e. A ''Final Decision of the Operating Committee'' is an action or inaction of the Operating Committee as a result of the vote of the Operating Committee, but will not include the individual votes of a Participant.

f. The ''Operating Committee'' consists of the Participants, Pending Participants, Administrator and Processor, and designated Agents.

g. An ''Executive Session'' of the Operating Committee consists of the Participants, Administrator and Processor and designated Agents.

h. The ''Advisory Committee'' consists of any individual selected by the Operating Committee or a Plan Participant as an advisor to the Operating Committee.

i. The ''Legal Subcommittee'' of the Operating Committee consists of the Participants, Administrator and Processor and Legal Counsel.

3. Procedures

a. General

i. The Administrator and Processor will be the custodians of all documents discussed by the Operating Committee and will be responsible for maintaining the classification of such documents pursuant to this Policy.

ii. The Administrator may, under delegated authority, designate documents as Restricted, Highly Confidential, or Confidential, which will be determinative unless altered by a majority vote of the Operating Committee.

iii. *The* Administrator will ensure that all Restricted, Highly Confidential, or Confidential documents are properly labeled *and, if applicable, electronically safeguarded.*

iv. All contracts between the Operating Committee and its Agents shall require Operating Committee information to be treated as Confidential Information that may not be disclosed to third parties, except as necessary to effect the terms of the contract or as required by law, and shall incorporate the terms of this Policy, or terms that are substantially equivalent or more restrictive, into the contract.

b. Procedures Concerning Restricted Information

i. *Except as provided below, Covered Persons in possession of Restricted Information are prohibited from disclosing it to others, including Agents. This prohibition does not apply to disclosures to the staff of the SEC or as otherwise required by law, or to other Covered Persons as expressly provided for by this Policy.* Restricted Information will be kept in confidence by the Administrator and Processor and will not be disclosed to the Operating Committee or any subcommittee thereof, or during Executive Session, or the Advisory Committee, except as follows:

1. If the Administrator determines that it is appropriate to share a customer's financial information with the Operating Committee or a subcommittee thereof, the Administrator will first anonymize the information by redacting the customer's name and any other information that

may lead to the identification of the customer.

2. The Administrator may disclose the identity of a customer that is the subject of Restricted Information in Executive Session only if the Administrator determines in good faith that it is necessary to disclose the customer's identity in order to obtain input or feedback from the Operating Committee or a subcommittee thereof about a matter of importance to the Plan. In such an event, the Administrator will change the designation of the information at issue from ''Restricted Information'' to ''Highly Confidential Information,'' and its use will be governed by the procedures for Highly Confidential Information in paragraph (c) below.

3. The Administrator may share Restricted Information related to any willful, reckless or grossly negligent conduct by a customer discovered by the Administrator with the UTP Administrator or with the *staff of the* SEC, as appropriate, upon majority vote of the Operating Committee in Executive Session, provided that, in any report by the Administrator during Executive Session related to such disclosure, the Administrator anonymizes the information related to the wrongdoing by removing the names of the party or parties involved, as well as any other information that may lead to the identification of such party or parties.

c. Procedures Concerning Highly Confidential Information

i. Disclosure of Highly Confidential Information:

1. *Except as provided below, Covered Persons in possession of Highly Confidential Information are prohibited from disclosing it to others, including Agents. This prohibition does not apply to disclosures to the staff of the SEC or as otherwise required by law, or to other Covered Persons authorized to receive it.* Highly Confidential Information may be disclosed only in Executive Session of the Operating Committee or to the Legal Subcommittee.

2. Highly Confidential Information may be disclosed to the staff of the SEC, unless it is protected by the Attorney-Client Privilege or the Work Product Doctrine. Any disclosure of Highly Confidential Information to the staff of the SEC will be accompanied by a FOIA Confidential Treatment request.

3. Apart from the foregoing, the Operating Committee has no power to authorize any other disclosure of Highly Confidential Information.

ii. In the event that a Covered Person is determined by a majority vote of the Operating Committee to have disclosed Highly Confidential Information, the Operating Committee will determine the appropriate remedy for the breach based on the facts and circumstances of the event. For the representatives of a Participant, remedies include a letter of complaint submitted to the SEC, which may be made public by the Operating Committee. For a member of the Advisory Committee, remedies include removal of that member from the Advisory Committee.

d. Procedures Concerning Confidential Information

i. Confidential Information may be disclosed to the Operating Committee, any subcommittee thereof, and the Advisory Committee. A Covered Person *may only disclose Confidential Information to other persons who need to receive such information to fulfill their responsibilities to the Plan. A Covered Person also may disclose Confidential Information to* [will not disclose Confidential Information to any individual that is not either a Covered Person or a member of]the staff of the SEC, [except] *as authorized by* [with authorization of] the Operating Committee as described below, or as may be otherwise required by law.

ii. The Operating Committee or a subcommittee thereof may authorize the disclosure of Confidential Information by an affirmative vote of the number of members that represent a majority of the total number of members of the Operating Committee or subcommittee. Notwithstanding the foregoing, the Operating Committee will not authorize the disclosure of Confidential Information that is generated by a Participant or Advisor and designated by that Participant or Advisor as Confidential, unless such Participant or Advisor consents to the disclosure.

iii. Members of the Advisory Committee may be authorized by the Operating Committee to disclose particular Confidential Information *only in furtherance of the interests of the Plan,* to enable them to consult with industry representatives or technical experts, provided that the Member of the Advisory Committee takes any steps requested by the Operating Committee to prevent further dissemination of that Confidential Information, including providing the individual(s) consulted with a copy of this policy and requesting that person to maintain the confidentiality of such information in a manner consistent with this policy.

iv. A Covered Person that is a representative of a Participant may *be authorized by the Operating Committee to* disclose *particular* Confidential Information [and Highly Confidential Information] to other employees or agents of the Participant or its affiliates only *in furtherance of the interests of the Plan* as needed for such Covered Person to perform his or her function on behalf of the *Plan* [Participant, as reasonably determined by the Covered Person]. A copy of this policy will be made available to recipients of such information who are employees or agents of a Participant or its affiliates that are not Covered Persons, who will be required to abide by this policy.

v. A Covered Person may disclose their own individual views and statements that may otherwise be considered Confidential Information without obtaining authorization of the Operating Committee, provided that in so disclosing, the Covered Person is not disclosing the views or statements of any other Covered Person or Participant that are considered Confidential Information.

vi. *A person that has reason to believe that Confidential Information has been disclosed by another without the authorization of the Operating Committee or otherwise in a manner inconsistent with this Policy may report such potential unauthorized disclosure to the Chair of the Operating Committee. In addition, a* [A]Covered Person that discloses Confidential Information without the authorization of the Operating Committee will report such disclosure to the Chair of the Operating Committee. Such *self-reported* unauthorized disclosure of Confidential Information will be recorded in the minutes of the meeting of the Operating Committee and will contain: (a) The name(s) of the person(s) who disclosed such Confidential Information, and (b) a description of the Confidential Information disclosed. The name(s) of the person(s) who disclosed such Confidential Information will also be recorded in any publicly available summaries of Operating Committee minutes.

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88820; File No. SR–CboeBYX–2020–013]

Self-Regulatory Organizations; Cboe BYX Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Provide Members Certain Optional Risk Settings Under Proposed Interpretation and Policy .03 of Rule 11.13

May 6, 2020.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (the ''Act''),[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on April 23, 2020, Cboe BYX Exchange, Inc. (the ''Exchange'') filed with the Securities and Exchange Commission (the ''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Exchange filed the proposal as a ''non-controversial'' proposed rule change pursuant to Section 19(b)(3)(A)(iii) of the Act[3] and Rule 19b–4(f)(6) thereunder.[4] 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 the Substance of the Proposed Rule Change

Cboe BYX Exchange, Inc. (''BYX'' or the ''Exchange'') proposes to provide Members certain optional risk settings under proposed Interpretation and Policy .03 of Rule 11.13. The text of the proposed rule change is provided in Exhibit 5.

The text of the proposed rule change is also available on the Exchange's website (*http://markets.cboe.com/us/equities/regulation/rule_filings/byx/*), at the Exchange's Office of the Secretary, 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 purpose of the proposed rule change is to provide Members[5] the option to utilize certain risk settings under proposed Interpretation and Policy .03 of Rule 11.13.[6] In order to help Members manage their risk, the Exchange proposes to offer optional risk settings that would authorize the Exchange to take automated action if a designated limit for a Member is breached. Such risk settings would provide Members with enhanced abilities to manage their risk with respect to orders on the Exchange. Paragraph (a) of proposed Interpretation and Policy .03 of Rule 11.13 sets forth the specific risk controls the Exchange proposes to offer. Specifically, the Exchange proposes to offer two credit risk settings as follows:

- The ''Gross Credit Risk Limit'', which refers to a pre-established maximum daily dollar amount for purchases and sales across all symbols, where both purchases and sales are counted as positive values. For purposes of calculating the Gross Credit Risk Limit, only executed orders are included; and
- The ''Net Credit Risk Limit'', which refers to a pre-established maximum daily dollar amount for purchases and sales across all symbols, where purchases are counted as positive values and sales are counted as negative values. For purposes of calculating the Net Credit Risk Limit, only executed orders are included.

The Gross Credit and Net Credit risk settings are similar to credit controls measuring both gross and net exposure provided for in paragraph (h) of Interpretation and Policy .01 of Rule 11.13, but with certain notable differences. Importantly, the proposed risk settings would be applied at a Market Participant Identifier (''MPID'') level, while the controls noted in paragraph (h) of Interpretation and Policy .01 are applied at the logical port level.[7] Therefore, the proposed risk management functionality would allow a Member to manage its risk more comprehensively, instead of relying on the more limited port level functionality offered today. Further, the proposed risk settings would be based on a notional execution value, while the controls noted in paragraph (h) of Interpretation and Policy .03 are applied based on a combination of outstanding orders on the Exchange's book and notional execution value. The Exchange notes that the current gross and net notional controls noted in paragraph (h) of Interpretation and Policy .03 will continue to be available in addition to the proposed risk settings.

Paragraph (c) of proposed Interpretation and Policy .03 of Rule 11.13 provides that a Member that does not self-clear may allocate and revoke[8] the responsibility of establishing and adjusting the risk settings identified in proposed paragraph (a) to a Clearing Member[9] that clears transactions on behalf of the Member, if designated in a manner prescribed by the Exchange.

By way of background, Exchange Rule 11.15(a) requires that all transactions passing through the facilities of the Exchange shall be cleared and settled through a Qualified Clearing Agency using a continuous net settlement system.[10] This requirement may be satisfied by direct participation, use of direct clearing services, or by entry into a corresponding clearing arrangement with another Member that clears through a Qualified Clearing Agency (*i.e.,* a Clearing Member). If a Member clears transactions through another Member that is a Clearing Member, such Clearing Member shall affirm to the Exchange in writing, through letter of authorization, letter of guarantee or other agreement acceptable to the Exchange, its agreement to assume responsibility for clearing and settling any and all trades executed by the Member designating it as its clearing

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] 15 U.S.C. 78s(b)(3)(A)(iii).

[4] 17 CFR 240.19b–4(f)(6).

[5] *See* Exchange Rule 1.5(n).

[6] The proposed rule changes are substantially similar to a recent rule amendment by Cboe BZX Exchange, Inc. (''BZX''). *See* Securities Exchange Act No. 88599 (April 8, 2020) 85 FR 20793 (April 14, 2020) (the ''BZX Approval'').

[7] A logical port represents a port established by the Exchange within the Exchange's System for trading and billing purposes. Each logical port established is specific to a Member or non-Member and grants that Member or non-Member the ability to accomplish a specific function, such as order entry, order cancellation, or data receipt.

[8] As discussed below, if a Member revokes the responsibility of establishing and adjusting the risk settings identified in proposed paragraph (a), the settings applied by the Member would be applicable.

[9] The term ''Clearing Member'' refers to a Member that is a member of a Qualified Clearing Agency and clears transactions on behalf of another Member. *See* Exchange Rule 11.15(a).

[10] The term ''Qualified Clearing Agency'' means a clearing agency registered with the Commission pursuant to Section 17A of the Act that is deemed qualified by the Exchange. *See* Exchange Rule 1.5(u). The rules of any such clearing agency shall govern with the respect to the clearance and settlement of any transactions executed by the Member on the Exchange.

firm.[11] Thus, while not all Members are Clearing Members, all Members are required to either clear their own transactions or to have in place a relationship with a Clearing Member that has agreed to clear transactions on their behalf in order to conduct business on the Exchange. Therefore, the Clearing Member that guarantees the Member's transactions on the Exchange has a financial interest in the risk settings utilized within the System[12] by the Member.

Paragraph (c) is proposed by the Exchange in order to offer Clearing Members an opportunity to manage their risk of clearing on behalf of other Members, if authorized to do so by the Member trading on the Exchange. Specifically, the Exchange believes such functionality would help Clearing Members to better monitor and manage the potential risks that they assume when clearing for Members of the Exchange. A Member may allocate or revoke the responsibility of establishing and adjusting the risk settings identified in proposed paragraph (a) to its Clearing Member via the risk management tool available on the web portal at any time. By allocating such responsibility, a Member would thereby cede all control and ability to establish and adjust such risk settings to its Clearing Member unless and until such responsibility is revoked by the Member, as discussed in further detail below. Because the Member is responsible for its own trading activity, the Exchange will not provide a Clearing Member authorization to establish and adjust risk settings on behalf of a Member without first receiving consent from the Member. The Exchange would consider a Member to have provided such consent if it allocates the responsibility to establish and adjust risk settings to its Clearing Member via the risk management tool available on the web portal. By allocating such responsibilities to its Clearing Member, the Member consents to the Exchange taking action, as set forth in proposed paragraph (d) of Interpretation and Policy .03, with respect to the Member's trading activity. Specifically, if the risk setting(s) established by the Clearing Member are breached, the Member consents that the Exchange will automatically block new orders submitted and cancel open orders until such time that the applicable risk setting is adjusted to a higher limit by the Clearing Member. A Member may also revoke responsibility allocated to its Clearing Member pursuant to this paragraph at any time via the risk management tool available on the web portal.

Paragraph (b) of proposed Interpretation and Policy .03 of Rule 11.13 provides that either a Member or its Clearing Member, if allocated such responsibility pursuant to paragraph (c) of the proposed Interpretation and Policy, may establish and adjust limits for the risk settings provided in proposed paragraph (a) of Interpretation and Policy .03. A Member or Clearing Member may establish and adjust limits for the risk settings through the Exchange's risk management tool available on the web portal. The risk management web portal page will also provide a view of all applicable limits for each Member, which will be made available to the Member and its Clearing Member, as discussed in further detail below.

Proposed paragraph (d) of Interpretation and Policy .03 of Rule 11.13 would provide optional alerts to signal when a Member is approaching its designated limit. If enabled, the alerts would generate when the Member breaches certain percentage thresholds of its designated risk limit, as determined by the Exchange. Based on current industry standards, the Exchange anticipates initially setting these thresholds at fifty, seventy, or ninety percent of the designated risk limit. Both the Member and Clearing Member[13] would have the option to enable the alerts via the risk management tool on the web portal and designate email recipients of the notification.[14] The proposed alert system is meant to warn a Member and Clearing Member of the Member's trading activity, and will have no impact on the Member's order and trade activity if a warning percentage is breached. Proposed paragraph (e) of Interpretation and Policy .03 of Rule 11.13 would authorize the Exchange to automatically block new orders submitted and cancel all open orders in the event that a risk setting is breached. The Exchange will continue to block new orders submitted until the Member or Clearing Member, if allocated such responsibility pursuant to paragraph (c) of proposed Interpretation and Policy .03, adjusts the risk settings to a higher threshold. The proposed functionality is designed to assist Members and Clearing Members in the management of, and risk control over, their credit risk. Further, the proposed functionality would allow the Member to seamlessly avoid unintended executions that exceed their stated risk tolerance.

The Exchange does not guarantee that the proposed risk settings described in proposed Interpretation and Policy .03, are sufficiently comprehensive to meet all of a Member's risk management needs. Pursuant to Rule 15c3–5 under the Act,[15] a broker-dealer with market access must perform appropriate due diligence to assure that controls are reasonably designed to be effective, and otherwise consistent with the rule.[16] Use of the Exchange's risk settings included in proposed Interpretation and Policy .03 will not automatically constitute compliance with Exchange or federal rules and responsibility for compliance with all Exchange and SEC rules remains with the Member.

Additionally, as the Exchange currently has the authority to share any of a Member's risk settings specified in Interpretation and Policy .01 of Rule 11.13 under Exchange Rule 11.15(f) with the Clearing Member that clears transactions on behalf of the Member, the Exchange also seeks such authority as it pertains to risk settings specified in proposed Interpretation and Policy .03. Existing Rule 11.15(f) provides the Exchange with authority to directly provide Clearing Members that clear transactions on behalf of a Member, to share any of the Member's risk settings set forth under Interpretation and Policy .01 to Rule 11.13.[17] The purpose of such a provision under Rule 11.15(f) was implemented in order to reduce the administrative burden on participants on the Exchange, including both Clearing Members and Members, and to ensure that Clearing Members receive information that is up to date and conforms to the settings active in the System. Further, the provision was implemented because the Exchange

[11] A Member can designate one Clearing Member per Market Participant Identifier (''MPID'') associated with the Member.

[12] System is defined as ''the electronic communications and trading facility designated by the Board through which securities orders of Members are consolidated for ranking, execution and, when applicable, routing away.'' *See* Exchange Rule 1.5(aa).

[13] A Clearing Member would have the ability to enable alerts regardless of whether it was allocated responsibilities pursuant to proposed paragraph (c).

[14] The Member and Clearing Member may input any email address for which an alert will be sent via the risk management tool on the web portal.

[15] 17 CFR 240.15c3–5.

[16] *See* Division of Trading and Markets, Responses to Frequently Asked Questions Concerning Risk Management Controls for Brokers or Dealers with Market Access, *available at https://www.sec.gov/divisions/marketreg/faq-15c-5-risk-management-controls-bd.htm.*

[17] By using the optional risk settings provided in Interpretation and Policy .01, a Member opts-in to the Exchange sharing its risk settings with its Clearing Member. Any Member that does not wish to share such risk settings with its Clearing Member can avoid sharing such settings by becoming a Clearing Member. *See* Securities Exchange Act Release No. 80612 (May 5, 2017) 82 FR 22024 (May 11, 2017) (SR–BatsBYX–2017–07).

believed such functionality would help Clearing Members to better monitor and manage the potential risks that they assume when clearing for Members of the Exchange. Now, the Exchange also proposes to amend paragraph (f) of Exchange Rule 11.15 to authorize the Exchange to share any of a Member's risk settings specified in proposed Interpretation and Policy .03 to Rule 11.13 with the Clearing Member that clears transactions on behalf of the Member. The Exchange notes that the use by a Member of the risk settings offered by the Exchange is optional. By using these proposed optional risk settings, a Member therefore also opts-in to the Exchange sharing its designated risk settings with its Clearing Member. The Exchange believes that its proposal to offer additional risk settings will allow Members to better manage their credit risk. Further, by allowing Members to allocate the responsibility for establishing and adjusting such risk settings to its Clearing Member, the Exchange believes Clearing Members may reduce potential risks that they assume when clearing for Members of the Exchange. The Exchange also believes that its proposal to share a Member's risk settings set forth under proposed Interpretation and Policy .03 to Rule 11.13 directly with Clearing Members reduces the administrative burden on participants on the Exchange, including both Clearing Members and Members, and ensures that Clearing Members are receiving information that is up to date and conforms to the settings active in the System.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the ''Act'') and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.[18] Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5) [19] requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest.

Specifically, the Exchange believes the proposed amendment will remove impediments to and perfect the mechanism of a free and open market and a national market system because it provides additional functionality for a Member to manage its credit risk. In addition, the proposed risk settings could provide Clearing Members, who have assumed certain risks of Members, greater control over risk tolerance and exposure on behalf of their correspondent Members, if allocated responsibility pursuant to proposed paragraph (c), while also providing an alert system that would help to ensure that both Members and its Clearing Member are aware of developing issues. As such, the Exchange believes that the proposed risk settings would provide a means to address potentially market-impacting events, helping to ensure the proper functioning of the market.

In addition, the Exchange believes that the proposed rule change is designed to protect investors and the public interest because the proposed functionality is a form of risk mitigation that will aid Members and Clearing Members in minimizing their financial exposure and reduce the potential for disruptive, market-wide events. In turn, the introduction of such risk management functionality could enhance the integrity of trading on the securities markets and help to assure the stability of the financial system.

Further, the Exchange believes that the proposed rule will foster cooperation and coordination with persons facilitating transactions in securities because the Exchange will provide alerts when a Member's trading activity reaches certain thresholds, which will be available to both the Member and Clearing Member. As such, the Exchange may help Clearing Members monitor the risk levels of correspondent Members and provide tools for Clearing Members, if allocated such responsibility, to take action.

The proposal will permit Clearing Members who have a financial interest in the risk settings of Members to better monitor and manage the potential risks assumed by Clearing Members, thereby providing Clearing Members with greater control and flexibility over setting their own risk tolerance and exposure. To the extent a Clearing Member might reasonably require a Member to provide access to its risk settings as a prerequisite to continuing to clear trades on the Member's behalf, the Exchange's proposal to share those risk settings directly reduces the administrative burden on participants on the Exchange, including both Clearing Members and Members. Moreover, providing Clearing Members with the ability to see the risk settings established for Members for which they clear will foster efficiencies in the market and remove impediments to and perfect the mechanism of a free and open market and a national market system. The proposal also ensures that Clearing Members are receiving information that is up to date and conforms to the settings active in the System. The Exchange believes that the proposal is consistent with the Act, particularly Section 6(b)(5),[20] because it will foster cooperation and coordination with persons engaged in facilitating transactions in securities and more generally, will protect investors and the public interest, by allowing Clearing Members to better monitor their risk exposure and by fostering efficiencies in the market and removing impediments to and perfect the mechanism of a free and open market and a national market system.

Finally, the Exchange believes that the proposed rule change does not unfairly discriminate among the Exchange's Members because use of the risk settings are optional and are not a prerequisite for participation on the Exchange. The proposed risk settings are completely voluntary and, as they relate solely to optional risk management functionality, no Member is required or under any regulatory obligation to utilize them.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. In fact, the Exchange believes that the proposal may have a positive effect on competition because it would allow the Exchange to offer risk management functionality that is comparable to functionality that has been adopted by other national securities exchanges.[21] Further, by providing Members and their Clearing Members additional means to monitor and control risk, the proposed rule may increase confidence in the proper functioning of the markets and contribute to additional competition among trading venues and broker-dealers. Rather than impede competition, the proposal is designed to facilitate more robust risk management by Members and Clearing Members, which, in turn, could enhance the

[18] 15 U.S.C. 78f(b).

[19] 15 U.S.C. 78f(b)(5).

[20] 15 U.S.C. 78f(b)(5).

[21] *Supra* note 6.

integrity of trading on the securities markets and help to assure the stability of the financial system.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

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 [22] and Rule 19b–4(f)(6) thereunder.[23]

A proposed rule change filed pursuant to Rule 19b–4(f)(6) under the Act [24] normally does not become operative for 30 days after the date of its filing. However, Rule 19b–4(f)(6)(iii) [25] 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 asked the Commission to waive the 30-day operative delay so that the Exchange may implement the proposed risk controls on the anticipated launch date of April 24, 2020. The Exchange states that waiver of the operative delay would allow Members to immediately utilize the proposed functionality to manage their risk. For this reason, the Commission believes that waiver of the 30-day operative delay is consistent with the protection of investors and the public interest. Therefore, the Commission hereby waives the operative delay and designates the proposal as operative upon filing.[26]

At any time within 60 days of the filing of the 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 change 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 (*http://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–CboeBYX–2020–013 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–CboeBYX–2020–013. 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 (*http://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 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–CboeBYX–2020–013, and should be submitted on or before June 2, 2020.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[27]

J. Matthew DeLesDernier,

Assistant Secretary.

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[22] 15 U.S.C. 78s(b)(3)(A).

[23] 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.

[24] 17 CFR 240.19b–4(f)(6).

[25] 17 CFR 240.19b–4(f)(6)(iii).

[26] For purposes only of waiving the 30-day operative delay, the Commission also has considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[27] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88818; File No. SR–CboeEDGX–2020–018]

Self-Regulatory Organizations; Cboe EDGX Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating To Amend Its Definition of Bulk Messages in Rule 16.1 and Amend Rule 21.1(j)(3)

May 6, 2020.

Pursuant to 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 24, 2020, Cboe EDGX Exchange, Inc. (the ''Exchange'' or ''''EDGX'') filed with the Securities and Exchange Commission (the ''Commission'') the 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

Cboe EDGX Exchange, Inc. (the ''Exchange'' or ''EDGX Options'') proposes to amend its definition of bulk messages in Rule 16.1 and amend Rule 21.1(j)(3). The text of the proposed rule change is provided in Exhibit 5.

The text of the proposed rule change is also available on the Exchange's website (*http://markets.cboe.com/us/options/regulation/rule_filings/edgx/*), at the Exchange's Office of the Secretary, and at the Commission's Public Reference Room.

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

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 proposes to amend its rules in connection with bulk message functionality to offer this functionality exclusively to Market-Makers on the Exchange. Currently, EDGX Options Market-Makers submit their quotes electronically as bulk messages. A bulk message is a single electronic message a User may submit to the Exchange in which the User may enter, modify, or cancel up to an Exchange-specified number of bids and offers. Bulk message functionality was adopted by the Exchange in connection with a recent technology migration and designed to be consistent with the technology offering of the Exchange's affiliated options exchanges, Cboe Exchange, Inc. (''Cboe Options'') and Cboe C2 Exchange, Inc. (''C2'').[3] Currently, the definition of a bulk message in Rule 16.1 provides that a User may submit a bulk message through a bulk port, which is a dedicated logical port. Current Rule 21.1(j)(3) provides that a bulk message submitted through a logical port is subject to the following: (1) It has a Time-in-Force of Day; (2) a Market-Maker with an appointment in a class may designate a bulk message for that class as Post Only or Book Only, and other Users must designate a bulk message for that class as Post Only; and (3) a User may establish a default MTP Modifier of MCN, MCO, or MCB, and a default value of Attributable or Non-Attributable, for a bulk port, each of which applies to all bulk messages submitted to the Exchange through that bulk port. Additionally, Users may submit single orders through a bulk port in the same manner as Users may submit orders to the Exchange through any other type of port, including designated with any order instruction and any time-in-force,[4] and as auction responses (using auction response messages). The primary purpose of bulk ports and bulk messages is to encourage liquidity provision, particularly by Market-Makers, on the Exchange.[5]

The Exchange proposes to amend the definition of bulk messages in Rule 16.1 so that Market-Makers may exclusively submit bulk messages and proposes to update Rule 21.1(j)(3) regarding bulk ports accordingly. Specifically, the proposed rule change amends the definition of bulk messages to provide that the term ''bulk message'' means a single electronic message a User submits with an M Capacity (*i.e.,* for the account of a Market-Maker) to the Exchange in which the User may enter, modify, or cancel up to an Exchange-specified number of bids and offers. In this way, the bulk messages submitted through bulk ports would be attributed only to Market-Maker quotes. In line with the proposed amendment to the User Capacity permitted to submit bulk messages, the proposed rule change also updates Rule 21.1(j)(3)(A)(ii) to provide that, while a Market-Maker with an appointment in a class may designate a bulk message for that class as a Post Only or Book Only, a non-appointed Market-Maker, as opposed to any other User, must designate a bulk message for that class as Post Only. This is currently the case for Market-Makers submitting bulk messages in non-appointed classes and the proposed rule change merely reflects the specific type of other User (*i.e.,* Market-Makers not appointed in a class) that will be able to submit bulk messages. The Exchange also notes that the proposed rule change updates the term User to Market-Maker in Rule 21.1(j)(3)(A)(iii) to reflect the proposed amendment to the User Capacity permitted to submit bulk messages and provide uniformity for the terms used throughout Rule 21.1(j)(3)(A).

The Exchange notes that the vast majority of bulk messages submitted through bulk ports are for the account of a Market-Maker. Indeed, over the second half of March 2020 the Exchange observed that no non-Market-Makers submitted bulk messages through bulk ports. Because so few non-Market-Maker Users opt to use this functionality, the Exchange believes that the current demand does not warrant the Exchange resources necessary for ongoing System support for non-Market-Maker bulk messaging. The Exchange notes that the use of bulk messages is voluntary and non-Market-Maker Users will continue to be able to submit their single orders and auction responses through bulk ports and other logical ports in the same manner as they currently do.

The Exchange notes that limiting the offering of quoting functionality to Market-Makers is not new or unique as other options exchanges currently offer quoting functionality only to their market makers.[6] Indeed, bulk message functionality (including submission through bulk ports) is geared toward encouraging Market-Maker quoting on the Exchange. For example, the requirement that bulk messages have a time-in-force of Day is intended to be consistent with a Market-Maker's obligation to update its quotes in response to changed market conditions in its appointed classes, and the provision that allows Market-Makers to designate their bulk messages as Post Only or Book Only (as opposed to the limitation to Post Only for other Users' bulk messages) is intended to provide Market-Makers with flexibility to use these instructions with respect to their bulk messages as additional tools to meet their quoting obligations in a manner they deem appropriate.[7] Additionally, the Exchange notes that its affiliated options exchanges, C2 and Cboe Options, as well as Cboe BZX Exchange, Inc. (''BZX Options'') are simultaneously submitting filings to update their corresponding rules in connection with bulk messages. Thus, the proposed rule change is intended to continue to harmonize technology offerings across the affiliated options exchanges. Additionally, C2 and Cboe Options just recently adopted bulk message functionality to replace substantially similar quotation functionality that was previously offered only to their market makers.[8]

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the

[3] *See* Securities Exchange Release No. 84929 (December 21, 2018) 83 FR 67785 (December 31, 2018) (SR–CboeEDGX–2018–060).

[4] A Market-Maker with an appointment in a class may designate an order for that class submitted through a bulk port only as Post Only or Book Only, and other Users must designate an order for that class submitted through a bulk port as Post Only. *See* Rule 21.1(j)(3)(B)(i).

[5] *See supra* note 3.

[6] *See* Nasdaq Phlx Options 1, Section 7(a)(B), which provides for its ''Specialized Quote Feed'', a quoting interface offered specifically to market makers on Phlx; *and see generally* MIAX Options Rule 517, which provide for the different types of quotes and quoting mechanisms offered specifically to market makers on MIAX Options.

[7] *See supra* note 3.

[8] *See* Securities Exchange Release No. 86374 (July 15, 2019) 84 FR 34963 (July 19, 2019) (SR–CBOE–2019–033); and Securities Exchange Release No. 85038 (February 1, 2019) 84 FR 2598 (February 7, 2019) (SR–C2–2018–025).

''Act'') and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.[9] Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[10] requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[11] requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

In particular, the Exchange believes that the proposed rule change will remove impediments to and perfect the mechanism of a free and open market and national market system and benefit investors, because it will delete from the Rules a functionality that is currently unused and as a result, the Exchange will no longer offer, thereby promoting transparency in its Rules. The Exchange notes that other options exchanges currently offer their quoting functionality and/or interfaces exclusively to market makers on their exchanges.[12] Also, up until recently, C2 and Cboe Options offered exclusively to their market makers quoting functionality substantially similar to current bulk message functionality.[13] Moreover, the Exchange does not believe that the proposed rule change raises any new or novel issues for Users and will not affect the protection of investors and the public interest because this functionality is not currently used by non-Market-Makers. In addition to this, the Exchange notes that the submission of bulk messages to the Exchange is voluntary, and, as stated, non-Market-Makers will continue to be able to submit single order and auction responses through bulk ports and other logical ports to connect to the Exchange and enter orders, receive date, and access information. Also, the Exchange believes that the low non-Market-Maker usage rate of bulk message functionality does not warrant the continued resources necessary for System support of bulk messaging for non-Market-Maker Users. As a result, the Exchange believes the proposed rule change will also remove impediments to and perfect the mechanism of a free and open market and national market system by allowing the Exchange to reallocate System capacity and resources to other System functionality, which benefits all market participants.

Additionally, the Exchange does not believe that the proposed rule change would permit unfair discrimination as, according to March 2020 data, non-Market-Makers are not submitting bulk messages to the Exchange, and, as stated above, bulk message functionality is principally designed to assist Market-Makers in providing liquidity to the Exchange. The options market is driven by Market-Maker quotes, and thus Market-Maker quotes are critical to provide liquidity to the market and contribute to price discovery for investors. Additionally, Market-Makers are subject to continuous quoting obligations (which other Users are not), and bulk message functionality provides Market-Makers with a means to help them satisfy these obligations. Indeed, when bulk messages were adopted, the Exchange expected Market-Makers regularly to use bulk messages to input and update prices on multiple series of options at the same time, and noted that the functionality was intended primarily for the use of Market-Makers.[14]

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange does not believe that the proposed rule change will change will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because bulk messages functionality will be available for all Exchange Market-Makers in the same manner as it is today. Non-Market-Makers will continue to be able to submit their single orders and auction responses through bulk ports, as well as all orders and other data through logical ports, in the same manner as they currently do. As noted above, this is consistent with the primary purpose of bulk messages, which is to encourage Market-Maker quoting and liquidity on the Exchange. The Exchange further notes that if any non-Market-Makers wish to submit liquidity to the Exchange using bulk messages they are free to register as an Exchange Market-Maker and choose the appointed classes in which they wish to quote. Non-Market-Makers currently do not use bulk message functionality, so the proposed rule change is not expected to have any impact on their business need.

The Exchange does not believe that the proposed rule change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because other options exchanges currently limit their quoting functionality and/or interface to market makers on their exchanges.[15] Additionally, as noted above, until recently the Exchange's affiliated options exchanges, C2 and Cboe Options, both which intend to update their corresponding bulk message rules in the same manner as proposed herein, offered exclusively to their market makers quoting functionality substantially similar to the current bulk message functionality.[16]

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

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)(iii) of the Act[17] and subparagraph (f)(6) of Rule 19b–4 thereunder.[18]

A proposed rule change filed pursuant to Rule 19b–4(f)(6) under the Act[19] normally does not become

[9] 15 U.S.C. 78f(b).

[10] 15 U.S.C. 78f(b)(5).

[11] *Id.*

[12] *See supra* note 6.

[13] *See supra* note 8.

[14] *See supra* note 3.

[15] *See supra* note 6.

[16] *See supra* note 8.

[17] 15 U.S.C. 78s(b)(3)(A)(iii).

[18] 17 CFR 240.19b–4(f)(6). In addition, Rule 19b–4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file 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 Commission has waived the five-day prefiling requirement in this case.

[19] 17 CFR 240.19b–4(f)(6).

operative for 30 days after the date of its filing. However, Rule 19b–4(f)(6)(iii) [20] 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 asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest. The Exchange represents that it disseminated advance notice of the proposed change to market participants on March 27, 2020 and plans to announce a specific implementation date in the near future. In addition, the Exchange states that the proposal is consistent with quoting functionality on other options exchanges which currently offer such functionality only to their market makers. The Commission notes that the proposed rule change does not present any unique or novel regulatory issues. Accordingly, the Commission hereby waives the operative delay and designates the proposal operative upon filing.[21]

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is: (i) Necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) 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 (*http://www.sec.gov/rules/sro.shtml);* or
- Send an email to *rule-comments@sec.gov. Please include File Number SR–CboeEDGX–2020–018 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–CboeEDGX–2020–018. 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 (*http://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 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–CboeEDGX–2020–018 and should be submitted on or before June 2, 2020.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[22]

J. Matthew DeLesDernier,

Assistant Secretary.

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BILLING CODE 8011–01–P

[20] 17 CFR 240.19b–4(f)(6)(iii).

[21] 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).

[22] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88817; File No. SR–CboeBZX–2020–037]

Self-Regulatory Organizations; Cboe BZX Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating To Amend Its Definition of Bulk Messages in Rule 16.1 and Amend Rule 21.1(l)(3)

May 6, 2020.

Pursuant to 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 24, 2020, Cboe BZX Exchange, Inc. (the ''Exchange'' or ''BZX'') filed with the Securities and Exchange Commission (''Commission'') the 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

Cboe BZX Exchange, Inc. (the ''Exchange'' or ''BZX Options'') proposes to amend its definition of bulk messages in Rule 16.1 and amend Rule 21.1(l)(3). The text of the proposed rule change is provided in Exhibit 5.

The text of the proposed rule change is also available on the Exchange's website (*http://markets.cboe.com/us/equities/regulation/rule_filings/bzx/*), at the Exchange's Office of the Secretary, 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.

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

Currently, BZX Options Market-Makers submit their quotes electronically as bulk messages. A bulk message is a single electronic message a User may submit to the Exchange in which the User may enter, modify, or cancel up to an Exchange-specified number of bids and offers. Bulk message functionality was adopted by the Exchange in connection with a recent technology migration and designed to be consistent with the technology offering of the Exchange's affiliated options exchanges, Cboe Exchange, Inc. (''Cboe Options'') and Cboe C2 Exchange, Inc. (''C2'').[3] Currently, the definition of a bulk message in Rule 16.1 provides that a User may submit a bulk message through a bulk port, which is a dedicated logical port. Current Rule 21.1(l)(3) provides that a bulk message submitted through a logical port is subject to certain conditions, including that a Market-Maker with an appointment in a class may designate a bulk message for that class as Post Only or Book Only, and other Users must designate a bulk message for that class as Post Only. Additionally, Users may submit single orders through a bulk port in the same manner as Users may submit orders to the Exchange through any other type of port, including designated with any order instruction and any time-in-force. The primary purpose of bulk ports and bulk messages is to encourage liquidity provision, particularly by Market-Makers, on the Exchange.[4]

The Exchange proposes to amend the definition of bulk messages in Rule 16.1 so that Market-Makers may exclusively submit bulk messages and proposes to update Rule 21.1(l)(3) regarding bulk ports accordingly. Specifically, the proposed rule change amends the definition of bulk messages to provide that the term ''bulk message'' means a single electronic message a User submits with an M Capacity (*i.e.,* for the account of a Market-Maker) to the Exchange in which the User may enter, modify, or cancel up to an Exchange-specified number of bids and offers. In this way, the bulk messages submitted through bulk ports would be attributed only to Market-Maker quotes. In line with the proposed amendment to the User Capacity permitted to submit bulk messages, the proposed rule change also updates Rule 21.1(l)(3)(A)(ii) to provide that, while a Market-Maker with an appointment in a class may designate a bulk message for that class as a Post Only or Book Only, a non-appointed Market-Maker, as opposed to any other User, must designate a bulk message for that class as Post Only. This is currently the case for Market-Makers submitting bulk messages in non-appointed classes and the proposed rule change merely reflects the specific type of other User (*i.e.,* Market-Makers not appointed in a class) that will be able to submit bulk messages. The Exchange also notes that the proposed rule change updates the term User to Market-Maker in Rules 21.1(l)(3)(A)(iii) and (iv) to reflect the proposed amendment to the User Capacity permitted to submit bulk messages and provide uniformity for the terms used throughout Rule 21.1(l)(3)(A).

The Exchange notes that the vast majority of bulk messages submitted through bulk ports are for the account of a Market-Maker. Indeed, over the second half of March 2020 the Exchange observed that only 0.05% of bulk messages submitted through bulk ports were submitted by non-Market-Makers. Because so few non-Market-Maker Users opt to use this functionality, the Exchange believes that the current demand does not warrant the Exchange resources necessary for ongoing System support for non-Market-Maker bulk messaging. The Exchange notes that the use of bulk messages is voluntary and non-Market-Maker Users will continue to be able to submit their single orders and auction responses through bulk ports and other logical ports in the same manner as they currently do.

The Exchange notes that limiting the offering of quoting functionality to Market-Makers is not new or unique as other options exchanges currently offer quoting functionality only to their market makers.[5] Indeed, bulk message functionality (including submission through bulk ports) is geared toward encouraging Market-Maker quoting on the Exchange. For example, the requirement that bulk messages have a time-in-force of Day is intended to be consistent with a Market-Maker's obligation to update its quotes in response to changed market conditions in its appointed classes, and the provision that allows Market-Makers to designate their bulk messages as Post Only or Book Only (as opposed to the limitation to Post Only for other Users' bulk messages) is intended to provide Market-Makers with flexibility to use these instructions with respect to their bulk messages as additional tools to meet their quoting obligations in a manner they deem appropriate.[6] Additionally, the Exchange notes that its affiliated options exchanges, C2 and Cboe Options, as well as Cboe EDGX Exchange, Inc. (''EDGX Options'') are simultaneously submitting filings to update their corresponding rules in connection with bulk messages. Thus, the proposed rule change is intended to continue to harmonize technology offerings across the affiliated options exchanges. Additionally, C2 and Cboe Options just recently adopted bulk message functionality to replace substantially similar quotation functionality that was previously offered only to their market makers.[7]

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the ''Act'') and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.[8] Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[9] requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[10] requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

In particular, the Exchange believes that the proposed rule change will remove impediments to and perfect the

[3] *See* Securities Exchange Release No. 84928 (December 21, 2018) 83 FR 67794 (December 31, 2018) (SR–CboeBZX–2018–092).

[4] *See supra* note 3.

[5] *See* Nasdaq Phlx Options 1, Section 7(a)(B), which provides for its ''Specialized Quote Feed'', a quoting interface offered specifically to market makers on Phlx; *and see generally* MIAX Options Rule 517, which provide for the different types of quotes and quoting mechanisms offered specifically to market makers on MIAX Options.

[6] *See supra* note 3.

[7] *See* Securities Exchange Release No. 86374 (July 15, 2019) 84 FR 34963 (July 19, 2019) (SR–CBOE–2019–033); and Securities Exchange Release No. 85038 (February 1, 2019) 84 FR 2598 (February 7, 2019) (SR–C2–2018–025).

[8] 15 U.S.C. 78f(b).

[9] 15 U.S.C. 78f(b)(5).

[10] *Id.*

mechanism of a free and open market and national market system and benefit investors, because it will delete from the Rules a functionality that is currently rarely used and as a result, the Exchange will no longer offer, thereby promoting transparency in its Rules. The Exchange notes that other options exchanges currently offer their quoting functionality and/or interfaces exclusively to market makers on their exchanges.[11] Moreover, the Exchange believes the proposed rule change will benefit investors by continuing to provide a harmonized technology offering across the Exchange and its affiliated options exchanges.[12] Also, up until recently, C2 and Cboe Options offered exclusively to their market makers quoting functionality substantially similar to current bulk message functionality.[13] Moreover, the Exchange does not believe that the proposed rule change raises any new or novel issues for Users and will not affect the protection of investors and the public interest because this functionality is so infrequently used by non-Market-Makers. In addition to this, the Exchange notes that the submission of bulk messages to the Exchange is voluntary, and, as stated, non-Market-Makers will continue to be able to submit single order and auction responses through bulk ports and other logical ports to connect to the Exchange and enter orders, receive date, and access information. Also, the Exchange believes that the low non-Market-Maker usage rate of bulk message functionality does not warrant the continued resources necessary for System support of bulk messaging for non-Market-Maker Users. As a result, the Exchange believes the proposed rule change will also remove impediments to and perfect the mechanism of a free and open market and national market system by allowing the Exchange to reallocate System capacity and resources to other System functionality, which benefits all market participants.

Additionally, the Exchange does not believe that the proposed rule change would permit unfair discrimination as, according to March 2020 data, a negligible portion of bulk messages are submitted by non-Market-Makers, and, as stated above, bulk message functionality is principally designed to assist Market-Makers in providing liquidity to the Exchange. The options market is driven by Market-Maker quotes, and thus Market-Maker quotes are critical to provide liquidity to the market and contribute to price discovery for investors. Additionally, Market-Makers are subject to continuous quoting obligations (which other Users are not), and bulk message functionality provides Market-Makers with a means to help them satisfy these obligations. Indeed, when bulk messages were adopted, the Exchange expected Market-Makers regularly to use bulk messages to input and update prices on multiple series of options at the same time, and noted that the functionality was intended primarily for the use of Market-Makers.[14]

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange does not believe that the proposed rule change will change will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because bulk messages functionality will be available for all Exchange Market-Makers in the same manner as it is today. Non-Market-Makers will continue to be able to submit their single orders and auction responses through bulk ports, as well as all orders and other data through logical ports, in the same manner as they currently do. As noted above, this is consistent with the primary purpose of bulk messages, which is to encourage Market-Maker quoting and liquidity on the Exchange. The Exchange further notes that if any non-Market-Makers wish to submit liquidity to the Exchange using bulk messages they are free to register as an Exchange Market-Maker and choose the appointed classes in which they wish to quote. Non-Market-Makers so infrequently use bulk message functionality, thus the proposed rule change is not expected to have any impact on their business need.

The Exchange does not believe that the proposed rule change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because other options exchanges currently limit their quoting functionality and/or interface to market makers on their exchanges.[15] Additionally, as noted above, until recently the Exchange's affiliated options exchanges, C2 and Cboe Options, both which intend to update their corresponding bulk message rules in the same manner as proposed herein, offered exclusively to their market makers quoting functionality substantially similar to the current bulk message functionality.[16]

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

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)(iii) of the Act[17] and subparagraph (f)(6) of Rule 19b–4 thereunder.[18]

A proposed rule change filed pursuant to Rule 19b–4(f)(6) under the Act[19] normally does not become operative for 30 days after the date of its filing. However, Rule 19b–4(f)(6)(iii)[20] 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 asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest. The Exchange represents that it disseminated advance notice of the proposed change to market participants on March 27, 2020 and plans to announce a specific implementation date in the near future. In addition, the Exchange states that the proposal is consistent with quoting functionality on other options exchanges which currently offer such functionality only

[11] *See supra* note 3.

[12] As stated, C2, Cboe Options, and EDGX Options intend to simultaneously submit filing to update their rules in connection with bulk messages in the same manner as proposed herein.

[13] *See supra* note 7.

[14] *See supra* note 3.

[15] *See supra* note 5.

[16] *See supra* note 7.

[17] 15 U.S.C. 78s(b)(3)(A)(iii).

[18] 17 CFR 240.19b–4(f)(6). In addition, Rule 19b–4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file 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 Commission has waived the five-day prefiling requirement in this case.

[19] 17 CFR 240.19b–4(f)(6).

[20] 17 CFR 240.19b–4(f)(6)(iii).

to their market makers. The Commission notes that the proposed rule change does not present any unique or novel regulatory issues. Accordingly, the Commission hereby waives the operative delay and designates the proposal operative upon filing.[21]

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is: (i) Necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) 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 (*http://www.sec.gov/rules/sro.shtml);* or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–CboeBZX–2020–037 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–CboeBZX–2020–037. 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 (*http://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 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–CboeBZX–2020–037 and should be submitted on or before June 2, 2020.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[22]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2020–10055 Filed 5–11–20; 8:45 am]

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[21] 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).

[22] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88829; File No. SR–NYSE–2020–41]

Self-Regulatory Organizations; New York Stock Exchange LLC; Notice of Filing and Immediate Effectiveness of Proposed Rule Change To Add Commentary .02 to Rule 7.35B

May 6, 2020.

Pursuant to Section 19(b)(1)[1] of the Securities Exchange Act of 1934 (the ''Act'')[2] and Rule 19b–4 thereunder,[3] notice is hereby given that on May 4, 2020, New York Stock Exchange LLC (''NYSE'' or the ''Exchange'') filed with the Securities and Exchange Commission (the ''Commission'') the proposed rule change as described in Items I and II below, which Items have been prepared by the self-regulatory organization. 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 add Commentary .02 to Rule 7.35B to provide that, for a temporary period that begins on May 6, 2020 and ends on the earlier of the reopening of the Trading Floor facilities or after the Exchange closes on May 15, 2020, the Exchange would make available specified Closing Auction Imbalance Information to member organizations beginning one hour before the end of Core Trading Hours. The proposed rule change is available on the Exchange's website at *www.nyse.com,* at the principal office of the Exchange, 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 self-regulatory organization 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 those 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 parts of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and the Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to add Commentary .02 to Rule 7.35B to provide that, for a temporary period that begins on May 6, 2020 and ends on the earlier of the reopening of the Trading Floor facilities or after the Exchange closes on May 15, 2020, the Exchange would make available specified Closing Auction Imbalance Information to member organizations beginning one hour before the end of Core Trading Hours.

Background

In its listed securities, the Exchange disseminates Auction Imbalance Information[4] for the Closing Auction, as provided for in Rule 7.35B(e), beginning at the Closing Auction Imbalance Freeze Time, which is 10 minutes before the scheduled end of Core Trading Hours.[5]

[1] 15 U.S.C.78s(b)(1).

[2] 15 U.S.C. 78a.

[3] 17 CFR 240.19b–4.

[4] The term ''Auction Imbalance Information'' means the information that is disseminated by the Exchange for an Auction (*see* Rule 7.35(a)(4)) and, depending on the Auction, can include Total Imbalance (Rule 7.35(a)(4)(A)(i)); Closing Imbalance (Rule 7.35(a)(4)(A)(ii); Paired Quantity, Unpaired Quantity, and Side of Unpaired Quantity (Rule 7.35(a)(4)(B)); Continuous Book Clearing Price (Rule 7.35(a)(4)(C)); and Closing Interest Only Clearing Price (Rule 7.35(a)(4)(D)).

[5] For the Closing Auction, the Exchange begins disseminating the following Auction Imbalance Information at the Closing Auction Imbalance

Continued

In addition to disseminating Auction Imbalance Information on its proprietary data feeds, specified Auction Imbalance Information is also made available to member organizations via the NYSE Pillar Trade Ops Portal, which is a free web-based management tool for member organizations to manage their interaction with the Exchange.[6]

Auction Imbalance Information for the Closing Auction becomes available on the NYSE Pillar Trade Ops Portal at the Closing Auction Imbalance Freeze time, as provided for in Rule 7.35B(e)(1)(A), and includes the following content: Total Imbalance, Side of Total Imbalance, Paired Quantity, Continuous Book Clearing Price, and Closing Interest Only Clearing Price. On the portal, such data is updated every 30 seconds, and once updated, overwrites the prior data available on the portal. To access such Auction Imbalance Information, users of the NYSE Pillar Trade Ops Portal must manually query the tool to view Auction Imbalance Information.[7]

In addition, pursuant to Rule 7.35B(e)(1)(B), beginning two hours before the end of Core Trading Hours (*e.g.,* beginning at 2 p.m. Eastern Time) up to the Closing Auction Imbalance Freeze Time (*e.g.,* 3:50 p.m. Eastern Time), the Exchange makes available Total Imbalance, Side of Total Imbalance, Paired Quantity, Unpaired Quantity, Side of Unpaired Quantity, and if published, Manual Closing Imbalance, to Floor brokers for any security (i) in which a Floor broker has entered an order or (ii) as specifically requested by a Floor broker. This Auction Imbalance Information is provided in a manner that does not permit electronic distribution. Specifically, this information is displayed on the trading systems that Floor Brokers use on the Trading Floor.

Temporary Floor Closure Impacts Floor Brokers and Their Customers

Since March 9, 2020, markets worldwide have been experiencing unprecedented market-wide declines and volatility because of the ongoing spread of COVID–19. Beginning on March 16, 2020, to slow the spread of COVID–19 through social-distancing measures, significant limitations were placed on large gatherings throughout the country.

On March 18, 2020, the CEO of the Exchange made a determination under Rule 7.1(c)(3) that, beginning March 23, 2020, the Trading Floor facilities located at 11 Wall Street in New York City would close and the Exchange would move, on a temporary basis, to fully electronic trading.[8] Pursuant to Rule 7.1(e), the CEO notified the Board of Directors of the Exchange of this determination.

Because the Trading Floor is temporarily closed, Floor brokers are not present on the Trading Floor and do not have access to their Floor-based systems for trading and cannot enter orders available to Floor brokers, such as Closing D Orders. Unlike Market-on-Close (''MOC'') and Limit-on-Close (''LOC'') Orders, Closing D Orders can be entered into Exchange systems up to ten seconds before the end of Core Trading Hours.[9] By contrast, MOC and LOC Orders can be entered in the last ten minutes of trading only to offset a published Regulatory Closing Imbalance.[10] Accordingly, while the Trading Floor is closed, customers of Floor brokers seeking to participate in the Closing Auction must arrange to have their closing-only interest entered before 3:50 p.m.

Notwithstanding the temporary closure of the Trading Floor, Floor brokers continue to provide services to their institutional investor customers. For such customers, Floor brokers continue to play an important role for those transactions that require the expertise of a professional trading agent, and a key component of that role as agent for these sophisticated customers is to provide market ''color,'' including providing imbalance information leading into the close. However, because Floor brokers do not have access to their Floor-based systems, they no longer have access to the systems that display Auction Imbalance Information, as provided for under Rule 7.35B(e)(1)(B). As such, during this temporary period, Floor brokers are no longer able to provide their customers with the same level of market color about the Closing Auction as they would when the Trading Floor is open.

Proposed Rule Change

Both Floor brokers and their customers have requested that, during the temporary period while the Trading Floor is closed, be provided access to Auction Imbalance before 3:50 p.m. so that Floor brokers can provide a similar level of service that they provide when the Trading Floor is open. The Exchange has been advised that Floor brokers' lack of access to imbalance information is particularly impactful because Floor brokers cannot use Closing D Orders during this temporary period, and Floor broker customers need to enter their closing-only interest before 3:50 p.m. if they want to participate in the Closing Auction.

The Exchange has identified a temporary, interim technology solution to provide Floor brokers with Auction Imbalance Information before the Closing Auction Imbalance Freeze Time so that Floor brokers can continue to provide the type of service to their customers that they provided before the Trading Floor was temporarily closed. Specifically, the Exchange proposes to temporarily change the NYSE Pillar Trade Ops Portal to make the Closing Auction Imbalance Information available on that portal beginning at 3:00 p.m., rather than at the Closing Auction Imbalance Freeze Time at 3:50 p.m. Because the NYSE Pillar Trade Ops Portal is available to all member organizations, any User authorized to access the portal, including non-Floor brokers, would have access to this Auction Imbalance Information beginning at 3:00 p.m.

Because the Exchange would be leveraging different technology, the Auction Imbalance Information would differ from what is available to Floor brokers on the Trading Floor pursuant to Rule 7.35B(e)(1)(B). As described above, the portal would include Total Imbalance, Side of Total Imbalance, and Paired Quantity, which are provided under Rule 7.35B(e)(1)(B), and would also include Continuous Book Clearing Price and Closing Interest Only Clearing Price, which are not provided under Rule 7.35B(e)(1)(B). In addition, the portal does not support Unpaired

Freeze Time: Total Imbalance, Side of Total Imbalance, Paired Quantity, Unpaired Quantity, Side of Unpaired Quantity, Continuous Book Clearing Price, Closing Interest Only Clearing Price, and Regulatory Closing Imbalance. *See* Rules 7.35B(e)(1)(A) and 7.35B(e)(2). *See also* Rule 7.35(a)(7) (specifying the Closing Auction Imbalance Freeze Time).

[6] Through the NYSE Pillar Trade Ops Portal, NYSE member organizations can view their executed trade details, review their Pillar order entry and drop copy sessions, and view their firm's volume by liquidity tag. To gain access, a member organization's compliance department must submit a form to establish which individuals at that firm are authorized to become users of the NYSE Pillar Trade Ops Portal. Information about the NYSE Pillar Trade Ops Portal is available here: *https://www.nyse.com/pillar/trade-ops-portal.*

[7] *See* User Guide for the NYSE Trade Ops Portal, available here: *https://www.nyse.com/publicdocs/nyse/NYSE_Trade_Ops_Portal_User_Guide.pdf.* The static information that is displayed can be manually exported to an Excel table, but is not otherwise not available for real-time distribution of the data.

[8] The Exchange's current rules establish how the Exchange will function fully-electronically. The CEO also closed the NYSE American Options Trading Floor, which is located at the same 11 Wall Street facilities, and the NYSE Arca Options Trading Floor, which is located in San Francisco, CA. *See* Press Release, dated March 18, 2020, available here: *https://ir.theice.com/press/press-releases/all-categories/2020/03-18-2020-204202110.*

[9] *See* Rule 7.35B(f)(3).

[10] *See* Rule 7.35B(f)(1).

Quantity or Side of Unpaired Quantity, which are provided under Rule 7.35B(e)(1)(B).

As described above, the Exchange provides data pursuant to Rule 7.35B(e)(1)(B) in a manner that does not permit electronic redistribution. Auction Imbalance Information made available before the Closing Auction Imbalance Freeze Time would be similarly limited. To view the data on the NYSE Pillar Trade Ops Portal, a User must manually query the tool, and the data is updated only every 30 seconds. Once the data is updated on a 30-second interval, the tool overwrites the last set of data that was available for display. The tool permits export of the data to an Excel file, but that export must be performed manually, and it only exports the static information that is available to be viewed at that given time. Accordingly, the NYSE Pillar Trade Ops Portal does not permit real-time electronic redistribution of the data. The purpose of this proposed rule change is to provide Floor brokers with a tool to provide preliminary guidance to their customers of whether to enter MOC or LOC Orders, and on which side of the market, earlier in the trading session. It would not replace or supersede the data that is distributed via the Exchange's proprietary data feeds beginning at the Closing Auction Imbalance Freeze Time.

Finally, this Auction Imbalance Information would be available beginning at 3:00 p.m., not 2:00 p.m. This proposed time period is consistent with the period when Auction Imbalance Information is made available on NYSE Arca, Inc. (''NYSE Arca'')[11] and NYSE American LLC (''NYSE American''), which both operate electronic auctions without a Trading Floor.[12] For example, NYSE American similarly restricts entry of MOC and LOC Orders after 3:50 p.m.,[13] and makes its Auction Imbalance Information available beginning at 3:00 p.m. The Exchange believes that providing such imbalance information beginning at 3:00 p.m. during this temporary period would provide sufficient time for member organizations and their customers to enter MOC and LOC Orders before the Closing Auction Imbalance Freeze Time.

To effect this change, the Exchange proposes to add Commentary .02 to Rule 7.35B, which would provide:

For a temporary period that begins on May 6, 2020 and ends on the earlier of the reopening of the Trading Floor facilities or after the Exchange closes on May 15, 2020, beginning one hour before the end of Core Trading Hours up to the Closing Auction Imbalance Freeze Time, the Exchange will make available Total Imbalance, Side of Total Imbalance, Paired Quantity, Continuous Book Clearing Price, and Closing Interest Only Clearing Price to member organizations. This Auction Imbalance Information will be provided in a manner that does not permit electronic real-time distribution and will be updated every 30 seconds.

At the Closing Auction Imbalance Freeze Time, Auction Imbalance Information for the Closing Auction would be made available as provided for under Rule 7.35B(e)(1)(A). Accordingly, this proposed rule text addresses only what would be different during the temporary period while the Trading Floor is closed, *i.e.,* that specified Auction Imbalance Information would be available to member organizations for the period 3:00 p.m. to 3:50 p.m. Eastern Time.

The Exchange has tested the technology change to begin disseminating such Auction Imbalance Information via the NYSE Pillar Trade Ops Portal at 3:00 p.m. Eastern Time. In addition, when the Trading Floors were temporarily closed, numerous Floor brokers received authorization to become Users of the NYSE Pillar Trade Ops Portal, and therefore already have connectivity to that portal to access Auction Imbalance Information. Accordingly, the Exchange would be able to implement the proposed rule change immediately when the technology is available, which is anticipated for May 6, 2020.

2. Statutory Basis

The proposed rule change is consistent with Section 6(b) of the Act,[14] in general, and furthers the objectives of Section 6(b)(5) of the Act,[15] in particular, in that it is designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in facilitating transactions in securities, and to remove impediments to and perfect the mechanism of a free and open market and a national market system.

As a result of uncertainty related to the ongoing spread of COVID–19, the U.S. equities markets are experiencing unprecedented market volatility. In addition, social-distancing measures have been implemented throughout the country, including in New York City, to reduce the spread of COVID–19. Directly related to such social-distancing measures, the CEO of the Exchange made a determination under Rule 7.1(c)(3) that beginning March 23, 2020, the Trading Floor facilities located at 11 Wall Street in New York City would close and the Exchange would move, on a temporary basis, to fully electronic trading.

The Exchange believes that the proposed rule change would remove impediments to and perfect the mechanism of a free and open market and a national market system because, during the temporary period while the Trading Floor is closed and Floor brokers do not have access to Auction Imbalance Information as provided for in Rule 7.35B(e)(1)(B), providing Auction Imbalance Information to member organizations via the NYSE Pillar Trade Ops Portal beginning at 3:00 p.m. would allow Floor brokers to provide their customers with similar levels of service with respect to providing market color about the Closing Auction as they would when the Trading Floor is open.

The proposed rule change is designed to be an interim, temporary solution that would be in effect only during the temporary period when the Trading Floor is closed. Because of the temporary nature of the proposed relief, the Exchange believes that it would remove impediments to and perfect the mechanism of a free and open market and a national market system to leverage existing technology rather than attempt to reproduce the data that is provided to Floor brokers pursuant to Rule 7.35B(e)(1)(B) on the exact same terms. By using existing technology, the Exchange can provide this service to Floor brokers on an expedited basis.

In addition, the Exchange believes that the proposed rule change would remove impediments to and perfect the mechanism of a free and open market and a national market system because during the temporary period during which the Trading Floor is closed, Closing D Orders are not available, and therefore, unless a Regulatory Closing Imbalance has been published, MOC and LOC Orders must be entered by the Closing Auction Imbalance Freeze Time. The Exchange therefore believes that during this period when Closing D Orders are not available, providing all member organizations with access to the Auction Imbalance Information at 3:00 p.m. would assist them in making their closing-interest order entry decisions before 3:50 p.m.

The Exchange further believes that providing such information beginning at 3:00 p.m. would remove impediments to and perfect the mechanism of a free and open market and a national market

[11] *See* NYSE Arca Rule 7.35–E(d)(1).

[12] *See* NYSE American Rule 7.35E(d)(1).

[13] *See* NYSE American Rule 7.35E(d)(2).

[14] 15 U.S.C. 78f(b).

[15] 15 U.S.C. 78f(b)(5).

system because, similar to how NYSE American functions, providing such imbalance information beginning 50 minutes before the Closing Auction Imbalance Freeze Time would provide sufficient time for member organizations to make order entry decisions for the Closing Auction.

The Exchange also believes that it would remove impediments to and perfect the mechanism of a free and open market and a national market system to provide that the Auction Imbalance Information that would be available on the NYSE Pillar Trade Ops Portal would not be provided in a manner that permits electronic real-time distribution. This proposed rule change is designed to provide Floor brokers with a tool to provide guidance to their customers of whether to enter MOC or LOC Orders, and on which side of the market. It would not replace or supersede the data that is distributed via the Exchange's proprietary data feeds beginning at the Closing Auction Imbalance Freeze Time.

The Exchange believes that, by clearly stating that this relief will be in effect through the earlier of the reopening of the Trading Floor facilities or the close of the Exchange on May 15, 2020, market participants will have advance notice that the Exchange would disseminate Auction Imbalance Information via the NYSE Pillar Trade Ops Tool beginning at 3:00 p.m. for only a temporary period.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change would impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The proposed rule change is not designed to address any competitive issues but rather is designed to provide Floor brokers with a tool to provide guidance to their customers of whether to enter MOC or LOC Orders, and on which side of the market, before the Closing Auction Imbalance Freeze Time. The proposed rule change is designed to be in effect only during a temporary period when the Exchange Trading Floor has been closed in response to social-distancing measures designed to reduce the spread of the COVID–19 virus and, as a result, Floor brokers do not have access to information as provided for in Rule 7.35B(e)(1)(B) and cannot enter Closing D Orders.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were solicited or received with respect to the proposed rule change.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the 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 [16] and Rule 19b–4(f)(6) thereunder.[17]

A proposed rule change filed under Rule 19b-4(f)(6) [18] normally does not become operative prior to 30 days after the date of the filing. However, pursuant to Rule 19b–4(f)(6)(iii),[19] the Commission may designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Exchange believes that waiver of the operative delay would be consistent with the protection of investors and the public interest because the proposed rule change is designed to be in effect only during a temporary period when the Exchange Trading Floor has been closed in response to social-distancing measures designed to reduce the spread of the COVID–19 virus and Floor brokers, as a result, do not have access to their Floor-based systems for trading and the information as provided for in Rule 7.35B(e)(1)(B) and cannot enter Closing D Orders. In addition, when the Trading Floors were temporarily closed, numerous Floor brokers received authorization to become Users of the NYSE Pillar Trade Ops Portal, and therefore already have connectivity to that portal to access Auction Imbalance Information. Moreover, the Exchange represents that it has tested, and will be able to implement, the proposed interim technology change on May 6, 2020. For the foregoing reasons, the Commission believes that waiver of the operative delay is consistent with the protection of investors and the public interest and has determined to waive the 30-day operative date so that the proposal may take effect upon filing.[20]

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 under Section 19(b)(2)(B) [21] of the Act to determine whether the proposed rule change 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 (*http://www.sec.gov/rules/sro.shtm*l); or
- Send an email to *rule-comments@sec.gov.* Please include File Number SR–NYSE–2020–41 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–NYSE–2020–41. 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 (*http://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

[16] 15 U.S.C. 78s(b)(3)(A).

[17] 17 CFR 240.19b–4(f)(6). As required under Rule 19b–4(f)(6)(iii), the Exchange provided the Commission with written notice of its intent to file the proposed rule change, along with a brief description and the 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.

[18] 17 CFR 240.19b–4(f)(6).

[19] 17 CFR 240.19b–4(f)(6)(iii).

[20] For purposes only of accelerating the operative date of this proposal, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).

[21] 15 U.S.C. 78s(b)(2)(B).

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 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–NYSE–2020–41 and should be submitted on or before June 2, 2020.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[22]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2020–10068 Filed 5–11–20; 8:45 am]

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[22] 17 CFR 200.30–3(a)(12).

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88824; File No. S7–24–89]

Joint Industry Plan; Order Approving the Forty-Fourth Amendment to the Joint Self-Regulatory Organization Plan Governing the Collection, Consolidation and Dissemination of Quotation and Transaction Information for Nasdaq-Listed Securities Traded on Exchanges on an Unlisted Trading Privileges Basis, as Modified by the Commission, Concerning Conflicts of Interest

May 6, 2020.

I. Introduction

On July 5, 2019,[1] the Joint Self-Regulatory Organization Plan Governing the Collection, Consolidation and Dissemination of Quotation and Transaction Information for Nasdaq-Listed Securities Traded on Exchanges on an Unlisted Trading Privileges Basis (''Nasdaq/UTP Plan'' or ''Plan'')[2] participants (''Participants'')[3] filed with the Securities and Exchange Commission (''SEC'' or ''Commission'') pursuant to Section 11A of the Securities Exchange Act of 1934 (''Act''),[4] and Rule 608 of Regulation National Market System (''NMS'') thereunder,[5] a proposal to amend the Nasdaq/UTP Plan. The amendment represents the 44th amendment to the Nasdaq/UTP Plan (''Amendment''). As described in the Amendment, the Participants proposed to make mandatory a conflicts of interest disclosure regime that currently is voluntary. The Amendment was published for comment in the **Federal Register** on January 14, 2020.[6] This order approves the Amendment to the Plan, as modified by the Commission. The Commission concludes that the Amendment, as modified, is appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanism of a national market system, or is otherwise in furtherance of the purposes of the Act.[7] A copy of the Amendment, as modified by the Commission, is attached as *Exhibit A* hereto.

II. Description of the Proposal

Under the current practice, which the Amendment proposed to make mandatory, the Participants,[8] the Processor,[9] the Administrator,[10] and the members of the Advisory Committee[11] (collectively, the ''Disclosing Parties'')[12] voluntarily respond to a set of questions designed to provide transparency regarding potential conflicts of interest of such parties. Each of the Disclosing Parties' responses is made publicly available on the Plan's website and is updated at least annually.[13] The Amendment would make this practice mandatory. The Participants stated that they believe that publicly providing these responses increases transparency and confidence in the governance of the Plan.[14]

According to the Participants, with exchanges permitted to offer both proprietary market data products and also acting as Participants in running the public market data stream, potential conflicts of interest are inherent.[15] There may be instances in which representatives from the Participants and Advisory Committee members have responsibilities with respect to both proprietary data and Securities Information Processor (''SIP'') data.[16] Drawing on the expertise of persons with such overlapping responsibilities may give rise to potential conflicts of interest, and to address such potential conflicts of interest, the Participants adopted a voluntary conflicts disclosure regime with questions that are tailored to elicit responses that disclose potential conflicts of interest.

Under their current approach to disclosure, each self-regulatory organization (''SRO'') discloses details about its ownership; whether it offers and charges for proprietary market data; the names of all representatives authorized to vote; and a narrative description of the representatives' role within the organization, including any direct responsibilities related to the development, dissemination, sale, or

[1] *See* Letter from Robert Books, Chair, Nasdaq/UTP Plan Operating Committee to Vanessa Countryman, Secretary, Commission, dated July 3, 2019 (''Transmittal Letter'').

[2] The Plan governs the collection, processing, and dissemination on a consolidated basis of quotation information and transaction reports in Eligible Securities for its Participants. This consolidated information informs investors of the current quotation and recent trade prices of Nasdaq securities. It enables investors to ascertain from one data source the current prices in all the markets trading Nasdaq securities. The Plan serves as the required transaction reporting plan for its Participants, which is a prerequisite for their trading Eligible Securities. *See* Securities Exchange Act Release No. 55647 (April 19, 2007), 72 FR 20891 (April 26, 2007).

[3] The Participants are the national securities association and national securities exchanges that submit trades and quotes to the Plan and include: Cboe BYX Exchange, Inc., Cboe BZX Exchange, Inc., Cboe EDGA Exchange, Inc., Cboe EDGX Exchange, Inc., Cboe Exchange, Inc., NYSE Chicago, Inc., Financial Industry Regulatory Authority, Inc., The Investors' Exchange LLC, Long-Term Stock Exchange, Inc., Nasdaq BX, Inc., Nasdaq ISE, LLC, Nasdaq PHLX, Inc., The Nasdaq Stock Market LLC, New York Stock Exchange LLC, NYSE American LLC, NYSE Arca, Inc., and NYSE National, Inc. (each a ''Participant'' and collectively, the ''Participants''). Participants are also members of the Plan's Operating Committee.

[4] 15 U.S.C. 78k–1.

[5] 17 CFR 242.608.

[6] *See* Securities Exchange Act Release No. 87908 (January 8, 2020), 85 FR 2202 (January 14, 2020) (''Notice''). Comments received in response to the Notice are available at *https://www.sec.gov/comments/s7-24-89/s72489.shtml.*

[7] 17 CFR 242.608(b)(2).

[8] *See supra* note 3 (listing the Participants).

[9] The ''Processor'' is charged with collecting, processing and preparing for distribution or publication all Plan information. The Processor for the Nasdaq/UTP Plan is Nasdaq Stock Market LLC (''Nasdaq'').

[10] The ''Administrator'' is charged with administering the Plan to include data feed approval, customer communications, contract management, and related functions. The Administrator of the Plan is Nasdaq.

[11] The ''Advisory Committee members'' are natural persons who represent particular types of financial services firms or actors in the securities market, and who were selected by Plan participants to be on the Advisory Committee.

[12] A list of the Processor, Administrator, and Advisory Committee members, along with their conflict of interest disclosures, is available at *https://www.utpplan.com/governance.*

[13] *See id.*

[14] *See* Notice, *supra* note 6, 85 FR at 2203.

[15] *See id.*

[16] *See id.*

marketing of the exchange's proprietary market data and the nature of those responsibilities. The Administrator and Processor disclose any employment or affiliation with an SRO and a narrative description of functions performed; whether it provides any services to, or has any responsibilities for the profitability of that SROs' proprietary market data products; and any policies and procedures in place to safeguard confidential Plan information. Finally, non-SRO Advisory Committee members disclose a description of their role at the firm with which they are associated, including whether they have responsibilities related to the use or procurement of market data or the firm's trading or brokerage services, whether they use the SIP or exchange proprietary data, whether they hold ownership in an SRO, and whether they are actively participating in any litigation against the Plan. The disclosures are made annually, updated in response to material changes, and are publicly posted on the Plan's website.

III. Discussion and Modifications by the Commission

Pursuant to Rule 608, the Commission shall approve the amendment, ''with such changes or subject to such conditions as the Commission may deem necessary or appropriate,'' if it finds that they are ''necessary or appropriate in the public interest, for the protection of investors and the maintenance of fair and orderly markets, to remove impediments to, and perfect the mechanisms of, a national market system, or otherwise in furtherance of the purposes of the Act.'' [17]

The Commission agrees with the Participants that potential conflicts of interest are inherent in the current market data governance structure where exchanges can offer proprietary market data products while they also act as Participants in running the public market data stream. Indeed, as we recognized in the Notice, the Commission has separately raised broader concerns about the impact of these conflicts on the governance of the Plan.[18] And the Commission solicited comment as to ''whether the Amendment to the current Plan addresses the concerns outlined in the Governance Notice or whether it should be further enhanced regarding conflicts of interest in national market system plan governance.''

After carefully considering the comments received on the Notice, the Commission is modifying the Amendment pursuant to Section 11A of the Act[19] and Rule 608 thereunder,[20] as discussed in detail below. The Commission agrees that the current voluntary conflicts of interest disclosure regime should be made mandatory, but believes that the modifications set forth below, including enhanced disclosure requirements and a requirement that an SRO be recused from voting when it or an affiliate is competing for a contract with the Plan, are appropriate in order to provide fuller transparency and further address conflicts of interest. Specifically, the Commission believes that the Plan should require additional public disclosures of any personal, business, or financial interests, and any employment relationships that would affect the ability of a party to the Plan, or its representative, to be impartial regarding the objectives and actions of the Plan. Further, the Commission believes that the Plan should impose additional disclosure requirements on Participants and their representatives, the Processor, the Administrator, Advisory Committee members, and service providers and subcontractors to the Plan.

The Commission believes that full disclosure of all material facts necessary for market participants and the public to understand the potential conflicts of interest inherent in the current market data structure is an important approach to dealing with those potential conflicts. Detailed, clear, and meaningful disclosures that provide insight into otherwise non-transparent structures and operations can raise awareness by bringing these important issues into the light. In turn, increased access to information can facilitate public confidence in Plan operations as well as promote self-awareness on the part of Disclosing Parties that can support their efforts to identify and address those potential conflicts. The Commission believes that by requiring full disclosure of all material facts necessary to identify the nature of a potential conflict of interest and the effect it may have on Plan action, all parties, including the Commission and the public, will be better positioned to evaluate competing interests among any of the parties involved in governing, operating, and overseeing the Plan, as those competing interests could materially affect their ability to carry out the purposes of the Plan.

Specifically, the Commission is modifying the Amendment as described below:

A. Enhanced Disclosures

1. Service Providers and Subcontractors

In the Notice, the Commission solicited comment on whether enhanced conflicts disclosures should be required. Among other questions, the Commission asked whether commenters ''think any other types of persons should be required to provide disclosures, such as service providers to the Administrator that provide audit, accounting, or other professional services.'' [21] Further, the Commission asked whether disclosures and conflicts policies should be applicable to subcontractors, for example where ''the Administrator enlists assistance from an auditor or any other professional services subcontractor for any of the Plan(s)'' including most prominently when ''the subcontractor is affiliated with an entity that is involved in the development, pricing, or sale of proprietary data products offered to SIP customers, or is subject to any other conflict.'' [22]

In response to the Notice, the Advisory Committee recommended that the Amendment ''should apply to service providers engaged in audit or other professional service functions.'' [23] Another commenter stated that ''service providers (*e.g.,* audit, accounting, legal, and other professional providers) should be required to provide disclosures to ensure such individuals remain independent of conflicts in both appearance and fact'' and asserted that ''[s]uch service providers are operating for the benefit of the Plan(s), and must be sufficiently independent of other functions to ensure they provide qualified, accurate and unbiased services.'' [24]

The Commission is modifying the Amendment to require the Participants, Administrator, Processor, or Operating Committee to only use service providers and subcontractors that make the

[17] 17 CFR 608(b)(2).

[18] *See* Notice, *supra* note 6, 85 FR at 2203. *See also* Securities Exchange Act Release No. 87906 (January 8, 2020), 85 FR 2164 (January 14, 2020) (File No. 4–757) (''Governance Notice'').

[19] 15 U.S.C. 78k–1.

[20] 17 CFR 608.

[21] Notice, *supra* note 6, 85 FR at 2205.

[22] *Id.* at 2206.

[23] Letter from CTA/UTP Advisory Committee to Vanessa Countryman, Secretary, Commission, dated January 24, 2020 (''Advisory Committee Letter''), at 2. The Advisory Committee further recommended that the audit function be managed directly by the Plan and performed by an entity different from the entity engaged to audit the exchange's proprietary data products. *See id.* The Commission is not incorporating that suggestion at this time but believes it warrants further consideration.

[24] Letter from Joseph Kinahan, Managing Director, Client Advocacy and Market Structure, TD Ameritrade to Vanessa A. Countryman, Secretary, Commission, dated February 4, 2020 (''TD Ameritrade Letter''), at 5.

required disclosures in certain circumstances.[25] Specifically, the Commission is adding the words ''and each service provider or subcontractor engaged in Plan business (including the audit of subscribers' data usage) that has access to Restricted or Highly Confidential Plan information'' and defining those, together with the existing parties, within the term ''Disclosing Parties'' as used in Section F.1 of the Plan. Further, the Commission is specifying that ''The Operating Committee, a Participant, Processor, or Administrator may not use a service provider or subcontractor on Plan business unless that service provider or subcontractor has agreed in writing to provide the disclosures required by this section and has submitted completed disclosures to the Administrator prior to starting work.'' As is the case for all other Disclosing Parties, disclosures provided by service providers and subcontractors would be made public.

The Commission believes that the proposed disclosures contained in the Amendment are insufficient in that they do not apply at all to service providers to the Plan. For example, service providers can be affiliated with a Participant or the Administrator. In that case, the potential conflicts of interest that apply to the Participant or Administrator could equally apply to the service provider. These conflicts, as discussed above, exist because some exchange Participants have a dual role as both an SRO responsible for the operation of the SIP, on one hand, and, on the other hand, as part of a publicly held company that offers proprietary data products and connectivity services.[26] The exchanges generate revenue from these proprietary data products in addition to the revenue the exchanges receive from the Plan. Given service providers' and subcontractors' access to competitively sensitive and commercially valuable Plan-related information, and the potential for competitive harm if they share such information with the Participants or their affiliates, the Commission believes that conflicts of interest can also arise with respect to service providers and subcontractors that may be under the direction of, or affiliated with, an exchange Participant, Administrator, or Processor, or those that may be under the direction of the Operating Committee. The Commission believes it is appropriate to include within the scope of the Amendments non-affiliates, including legal counsel, because they would be under the direction of one or more Participants, engaged in Plan business, and have access to Restricted or Highly Confidential Information. Accordingly, the inherent conflicts of interest faced by Participants, discussed above, could be perceived by a reasonable objective observer to also affect the ability of such non-affiliated persons to be impartial. Obtaining disclosures from such service providers and subcontractors would therefore serve the purposes of the Amendments to the same extent they do for any other Disclosing Party.

The Commission therefore believes it is appropriate to include service providers and subcontractors within the scope of the conflicts of interest disclosures by prohibiting the Operating Committee, a Participant, the Processor, or the Administrator from using a service provider or subcontractor on Plan business unless that service provider or subcontractor has agreed to submit and keep current the required disclosures.[27]

To implement the expansion of the required disclosures to service providers and subcontractors engaged in Plan business that have access to any level of confidential information, the Commission believes it is appropriate to add the following new section under *Required Disclosures* to apply to service providers and subcontractors:

Pursuant to Section IV.F.1. of the Plan, each service provider or subcontractor that has agreed in writing to provide required disclosures and be treated as a Disclosing Party pursuant to Section IV.F. of the Plan shall respond to the following questions and instructions:

- Is the service provider or subcontractor affiliated with a Participant, Processor, Administrator, or member of the Advisory Committee? If yes, disclose with whom the person is affiliated and describe the nature of the affiliation.
- If the service provider's or subcontractor's compensation is on a commission basis or is tied to specific metrics, provide a detailed narrative summary of how compensation is determined for performing work on behalf of the Plan.
- Is the service provider or subcontractor subject to policies and procedures (including information barriers) concerning the protection of confidential information that includes affiliates? If so, describe. If not, explain their absence.
- Does the service provider or subcontractor, or its representative, have any other relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with its responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.

These disclosures require information that details the nature of any affiliation with other Disclosing Parties, provides information on the service provider's compensation arrangement, and asks about information barriers given the sensitive information to which such persons have access, all of which are consistent with the disclosures required of other Disclosing Parties. Finally, these disclosures include the new ''catch-all'' question that the Commission is adding to all Disclosing Parties' disclosures, which is discussed further below.[28] Together, the Commission believes that these provisions will, as with their applicability to all other Disclosing Parties, provide important transparency into potential conflicts of interest that parties that provide important services to the Plan may encounter. The Commission believes that this transparency is important for service providers and subcontractors engaged in Plan business that have access to confidential Plan information because those service providers and subcontractors act at the direction of a Disclosing Party (*e.g.,* the Administrator or Processor) and may be affiliated with them, or may be acting at the direction of the Operating Committee and may be affiliated with one of the Participants that compose the Operating Committee.

[25] The Commission is using the term ''service providers and subcontractors'' to capture any natural person or entity engaged in Plan business, including those that may be affiliated with a Disclosing Party.

[26] For example, Participants may offer proprietary data products with content in excess of the core data offered by the SIPs, as well as other top-of-book proprietary data products with less content that can be marketed as a cheaper alternative to the SIP. Examples of such proprietary top-of-book products are NASDAQ Basic (*https://business.nasdaq.com/intel/GIS/nasdaq-basic.html*), Cboe One Feed (*https://markets.cboe.com/us/equities/market_data_services/cboe_one/*), and NYSE BBO (*https://www.nyse.com/market-data/real-time/bbo*).

[27] To the extent the Operating Committee, a Participant, the Processor, or the Administrator seeks to use the services of a service provider or subcontractor for Plan business, it would first need to secure a written commitment from the service provider or subcontractor to agree to submit a required disclosure and be treated as a Disclosing Party, and the service provider or subcontractor must in fact adhere to the provisions applicable to all Disclosing Parties, including the process for updating the disclosures and submitting them to the Administrator for public dissemination in Section F.1.b. and c. of the Plan as well as the recusal provisions in Section F.2 of the Plan.

[28] *See infra* Section III(A)(3)(d) (discussing the catch-all question).

As such, those service providers and subcontractors likely are subject to the same or similar potential conflicts of interest and thus should be treated like any other Disclosing Party in making public disclosures about those potential conflicts.

Further, the Commission believes it is appropriate to modify Section F.1. of the Plan to specify that the Disclosing Parties shall complete the applicable questionnaire [29] ''to provide the required disclosures set forth below to disclose all material facts necessary to identify potential conflicts of interest.'' The Commission believes it is appropriate to add this detail to Section F.1 of the Plan to emphasize that a Disclosing Party's responses to the required disclosures must be sufficiently detailed to disclose all material facts to identify applicable potential conflicts of interest. Disclosures that fail to disclose all material facts will be insufficient to identify potential conflicts of interest and to provide sufficient context for the public to understand how those potential conflicts of interest are relevant to the Plan's governance and operations. An example of a ''material fact necessary to identify potential conflicts of interest'' could include whether a situation giving rise to a potential conflict of interest could have a potential adverse effect on the Plan.[30]

Finally, the Commission is modifying Section F.1 of the Plan to provide that ''[i]f state laws, rules, or regulations, or applicable professional ethics rules or standards of conduct, would act to restrict or prohibit a Disclosing Party from making any particular required disclosure, a Disclosing Party shall refer to such law, rule, regulation, or professional ethics rule or standard and include in response to that disclosure the basis for its inability to provide a complete response. This does not relieve the Disclosing Party from disclosing any information it is not restricted from providing.'' The Commission believes this modification is appropriate to accommodate the potential that a small number of Disclosing Parties, for example service providers that are licensed attorneys, may be unable to complete one or more of the disclosures due to their obligations under potentially conflicting laws, rules, or professional standards. This modification will allow such a Disclosing Party to provide responses to the required disclosures by identifying the particular conflicting laws or professional standards and discussing the basis for its inability to provide a complete response while providing information it is not restricted from disclosing.

2. Scope of the Amendments

In the Notice, the Commission solicited comment on whether the Amendment is sufficient to elicit information necessary to provide insight into all potential conflicts. Among other questions, the Commission asked whether commenters ''believe that the Plan should require additional public disclosures of any personal, business, or financial interests, and any employment or other commercial relationships that could materially affect the ability of a party to be impartial regarding actions of the Plan'' as well as whether commenters ''believe that the proposed disclosure questions for each party are sufficient to identify the specific relationships that may give rise to a conflict under the Plan and related information.''[31] The Commission further asked whether commenters ''believe that the proposed questions effectively require all material facts necessary to not only identify the nature of the conflict, but also the effect it may have on the Plan'' and whether the Amendment should require ''additional public disclosures of any personal, business, or financial interests, and any employment or other commercial relationships that could materially affect the ability of a party to be impartial regarding actions of the Plan.'' [32]

The Commission also asked questions about the nature of the potential conflicts faced by parties involved with the operation and oversight of the Plan and whether commenters believe the Amendment would require adequate disclosure in sufficient detail about and/or address those conflicts. For example, the Commission stated: ''[w]ith Exchanges permitted to offer both proprietary market data products and also acting as Participants in running the public market data stream, potential conflicts of interest are inherent . . . .'' [33] The Amendment itself similarly provides that ''[t]here may be instances in which representatives from the Participants and Advisory Committee members have responsibilities with respect to both proprietary data and [SIP] data'' and that ''such overlapping responsibilities may give rise to potential conflicts of interest.'' [34]

In response to the Notice, the Advisory Committee said it believes the disclosure of conflicts of interest is important for Participants, Advisors, the Administrator, and the Processor but believes publishing the conflicts of interest, as proposed by the Participants, ''does not adequately address the conflicts of interest.'' [35] For example, the Advisory Committee believes that the disclosures ''do not address situations where Participants sell competing products and may vote [on Plan matters] in ways that protect the commercial interest of the Participant, rather than furthering the goals of the Plans.'' [36] To address this, the Advisory Committee recommended changes to expand the scope of the Amendment beyond disclosure and affirmatively require that individuals participating in the activities of the Plan's Operating Committee act in furtherance of the goals of the Plan, that individuals recuse themselves when there is a material conflict between the goals of the Plan and their interests or their employer's interest, and that service providers engaged in audit or other professional service functions also be subject to the conflicts of interest policy.[37]

Another commenter agreed with this viewpoint stating ''market developments have heightened the potential for and perception of conflicts of interest between the exchanges' commercial interests and their regulatory obligations under the Act and [Plan] to produce and provide core data.'' [38] The commenter stated that it ''does not believe the proposed amendments completely address the potential conflicts'' noting that ''the lower cost of exchange top of book products, coupled with the costs

[29] In the reference to the applicable questionnaire, the Commission is deleting the phrase ''attached to this UTP Plan as Exhibit 3.'' The Amendment, as modified, will require the Administrator to update the questionnaires. The Commission is not now attaching updated questionnaires as Exhibit 3.

[30] For example, a Participant that offers its own top-of-book data product to SIP customers for substantially lower fees than the SIP could be conflicted when considering a Plan proposal to have the SIP offer similar top-of-book products, and this conflict could influence a decision by the Plan not to offer such a product. Similarly, a Participant that offers an enhanced depth-of-book data product to SIP customers could be conflicted when considering a Plan proposal to expand the SIP to include enhanced depth-of-book data, and this conflict also could influence a decision by the Plan not to offer such a product. *See also* new Section F.1.a. of the Plan (specifying that a ''potential conflict of interest may exist when personal, business, financial, or employment relationships could be perceived by a reasonable objective observer to affect the ability of a person to be impartial''), which provides guidance as to the scope of the disclosures.

[31] Notice, *supra* note 6, 85 FR at 2205.

[32] *Id.* at 2205.

[33] *Id.* at 2204–05.

[34] *Id.* at 2205.

[35] Advisory Committee Letter, *supra* note 23, at 1–2.

[36] *Id.* at 2.

[37] *Id.*

[38] TD Ameritrade Letter, *supra* note 24, at 2.

associated with processes imposed by the Plans, including associated audit burdens, favors retail broker-dealer use of exchange proprietary top of book products, which puts the interests of the exchanges in producing such products above that of the Securities Information Processor and may create direct conflict with their roles as Administrators.'' [39] The commenter recommended that the ''Plan(s) should require that all individuals providing disclosures include any additional relationships, whether personal, employment, or commercially related, which may present a perceived or actual conflict of interest with their assigned role(s) for the Plan(s).'' [40]

A third commenter similarly stated that ''the structure of the Plans and their governance model is inherently conflicted'' and only fundamental reform can address the conflicts, which the commenter said could involve ''true independence'' of the Participants from the Administrator and the Processor.[41] One commenter broadly asserted that the ''required disclosures fail to identify many of the potential conflicts of interest inherent in the system, and utterly fail to quantify the magnitude of firms' conflicts of interest, financial incentives, and other relationships'' and ''perhaps at the most basic level, they generally don't provide the public with any information we didn't already know.'' [42]

The Commission agrees that the proposed amendments do not adequately address potential conflicts, and believes that a Disclosing Party's access to confidential information it obtains as a result of its involvement with the Plan can create potential conflicts of interest that could influence the decisions it makes with respect to the Plan's operation. The Commission believes that the Amendments should be modified to provide more transparency into those potential conflicts. These conflicts can impede the ''prompt, accurate, reliable and fair collection, processing, distribution, and publication of information with respect to quotations for and transactions in such securities and the fairness and usefulness of the form and content of such information.'' [43] For example, the exchanges' commercial interests in their proprietary data businesses, as well as the exchange-affiliated Administrator's access to confidential subscriber and audit information that is commercially and competitively valuable to that proprietary data business, have created conflicts of interest that could influence decisions as to the Plan's operation. As the Participants acknowledged in the Notice, disclosure of these conflicts and other potential conflicts of interest is an important step in addressing potential conflicts of interest.[44]

Given the importance of disclosing these potential conflicts of interest, the Commission is modifying the proposed Amendment to help ensure that the Amendment is clear and that the objectives of the disclosure requirements are uniformly applied. Specifically, as discussed above, the Commission is adding to Section F.1. of the Plan further detail to specify that the disclosures are eliciting information on ''all material facts necessary to identify potential conflicts of interest.'' Further, the Commission is including language to specify in new Section F.1.a. of the Plan that a ''potential conflict of interest may exist when personal, business, financial, or employment relationships could be perceived by a reasonable objective observer to affect the ability of a person to be impartial.'' This new text establishes an objective standard for the disclosures by requiring that the potential conflicts of interest to be disclosed are to be viewed through the lens of a reasonable objective observer considering impartiality. This standard is needed so that the requirement to disclose potential conflicts of interest is not triggered solely based on the subjective views of the Disclosing Party. Impartial third parties, including members of the public, will be among those reviewing the disclosures and they should be assured that, across all Disclosing Parties, the disclosures are comprehensive, consistent, and do not display the potentially biased perspective of the Disclosing Party. The disclosures must be meaningful and sufficiently detailed to provide any reasonable objective observer that reads the disclosures with adequate transparency into matters such that she is able to determine whether the Disclosing Party would be able to be impartial in its role with the operation and oversight of the Plan.

3. Enhanced Party-Specific Disclosures

In addition to asking questions about the overall scope and sufficiency of the Amendment and the general disclosure-based approach it contains, the Commission also solicited comment on a number of detailed questions in the Notice about the potential conflicts faced by various entities, including individual Disclosing Parties, service providers, and subcontractors.

a. Participants

In addition to those questions mentioned above, the Commission asked whether commenters ''believe that any individual representing a Participant that is directly involved in the management, development, pricing, or sale of proprietary data products offered to SIP customers should participate in discussions and related Plan votes regarding the pricing of SIP data products'' and how commenters ''believe Participants should address the conflicts their representatives may face in their dual role of pricing and developing SIP data products as well as their own proprietary data products.'' [45]

In response to the Notice, one commenter suggested that ''in addition to disclosing whether a participant's firm charges a fee for the provision of data, the participant should reveal the percentage of revenues derived from the sale of proprietary data, and separately core SIP data, as a percentage of total revenue.'' [46] Another commenter urged the Commission to either deny the Amendment or to expand it dramatically to include information that ''might actually help the Commission and third parties quantify and assess the Disclosing Parties' conflicts of interest'' such as ''a disclosure by each exchange of its costs in producing SIP data, the revenues from the SIP data, costs in producing competing proprietary data products, revenues from the competing data products, analyses of the extent of the customer overlap of those products, details regarding the projected impact of improving the content and timeliness of the SIPs on those competing data products, and more.'' [47]

On this issue, another commenter expressed concern about the ''potential for and perception of conflicts of interest between the exchanges' commercial interests and their regulatory obligations . . . to provide core data.'' [48] One commenter recommended broadly that questions eliciting disclosures for Participants, the

[39] *Id.* at 2–3.

[40] *Id.* at 6.

[41] *See* Letter from Jeff Brown, Senior Vice President—Legislative and Regulatory Affairs, Charles Schwab, to Vanessa Countryman, Secretary, Commission, dated February 4, 2020 (''Charles Schwab Letter''), at 3–4. *See also infra* note 72.

[42] Letter from Tyler Gellasch, Executive Director, The Healthy Markets Association, to Vanessa Countryman, Secretary, Commission, dated February 20, 2020 (''Healthy Markets Letter''), at 18.

[43] 15 U.S.C. 78k–1(c)(1)(B).

[44] *See* Notice, *supra* note 6, 85 FR at 2205.

[45] Notice, *supra* note 6, 85 FR at 2205.

[46] Letter from Rich Steiner; Head of Client Advocacy and Market Information, RBC Capital Markets, to Vanessa Countryman, Secretary, Commission, dated February 4, 2020 (''RBC Letter''), at 2.

[47] Healthy Markets Letter, *supra* note 42, at 18.

[48] TD Ameritrade Letter, *supra* note 24, at 2. *See supra* text accompanying note 39.

Processor, the Administrator, and Advisory Committee members should ''provide detailed and specific information regarding a potential conflict of an individual (and not specifically their employer)'' and the information should include not only the individual's general role ''but also specific information about that individual's contractual requirements, compensation structures, resource allocations, and information access that may cause a perceived conflict.'' [49] The commenter stated that enhanced disclosure ''would ensure sufficient, transparent information is available for the public to effectively analyze the potential conflicts being disclosed.'' [50]

After considering the comments received in response to the Notice, the Commission believes it is appropriate to enhance the required disclosures of Participants in two ways. First, the Commission is adding requested disclosures to a question regarding whether Participants offer proprietary data. Currently, the question asks whether the Participant firm offers real-time proprietary equity data and, if so, whether the Participant charges a fee. The Commission is modifying the question to require a Participant also to ''list each product, describe its content, and provide a link to the fee schedules where fees for each product are disclosed.'' [51] As suggested by a commenter, this additional disclosure follows logically from, and provides more information in relation to, the existing question of whether a Participant offers proprietary data and whether it charges for it. The Commission believes it is insufficient merely to ask a ''yes or no'' question on an issue that is at the core of the potential conflicts of interest inherent to the Plan's current governance structure. There are various types of proprietary data offered and fees charged for it, and these offerings and fees serve as the principal sources of the potential conflict. Without more information on the material underlying facts related to specific proprietary data offerings and fees, a simple disclosure that such offerings and fees exist is not sufficient to elucidate the nature and extent of the potential conflict. The Commission believes Participants should identify and describe the specific proprietary data products they offer. Doing so will allow anyone who reads the disclosure to evaluate the proprietary data products and assess whether and how they overlap with the SIP.

For example, as stated above, a Participant may offer more expensive proprietary data products with content in excess of the core data offered by the SIPs, as well as other top-of-book proprietary data products with less content that can be marketed as a less expensive alternative to the SIP. Both types of proprietary data products contain information that overlaps to some extent with what the SIP provides, but one is offered as a more expensive and enhanced data product while the other is offered as a less expansive and less expensive alternative to the SIP. In doing so, the Participant offers its own data product because the SIP does not offer something similar. The Participant, however, is not just offering a different product (potentially expanded in content or lower in price) compared to the SIP in this respect; it, together with other Participants, governs (and possibly operates) the SIP. Disclosure of certain information about these proprietary data products offered by a Participant, and a link to fee schedules for such products, can reveal material facts (*i.e.,* the Participant's pricing of its proprietary data products that it offers to SIP customers). These material facts are relevant to whether a Participant may, for example, be disincentivized to support expanding the content of SIP core data or to support the SIP offering an optional and less expensive data feed, as well as material facts relevant to a Participant's pricing strategy for the SIP as compared to its own proprietary data product offerings. Either of those cases would involve the SIP offering a similar product to that already offered as a proprietary data product by the Participant. With full disclosure of these material facts, a reasonable objective observer would better understand the potential conflict of interest the Participant faces in its governance of the Plan, including what conflicts of interest the Participant would face when it discusses and votes on SIP proposals to provide data products similar to those provided by the Participants at prices that match or undercut the Participant's own fees for proprietary products. As revised, the disclosures will provide valuable additional insight into the nature and extent of a principal source of the potential conflict of interest an exchange has in its dual role of overseeing the Plan while offering its own proprietary data products.

Second, the Commission is modifying the disclosures for the Participant's representative to require greater disclosure of the individual's connection with the Participant's proprietary market data business. Specifically, the Commission is adding the phrase ''sufficient for the public to identify the nature of any potential conflict of interest that could be perceived by a reasonable objective observer as having an effect on the Plan.'' Further, the Commission is adding to the question the following: ''If the representative works in or with the Participant's Proprietary Market Data business, describe the representative's roles and describe how that business and the representative's Plan responsibilities impact his or her compensation. In addition, describe how a representative's responsibilities with the Proprietary Market Data business may present a conflict of interest with his or her responsibilities to the Plan.''

This modification, which conforms to the modification of the scope of the Amendment discussed above, requires that Participants provide sufficient detail in their responses to this particular item because it is central to the potential conflicts of interest at issue. Without sufficiently detailed disclosure of the underlying facts, the disclosure would not provide effective insight into the potential conflicts of interest the Participant's representative personally has in his or her role with the Plan. For example, if the representative's compensation is tied directly and substantially to the profitability of the Participant's proprietary market data business, then the representative might face a conflict of interest when working on Plan matters, most notably when considering whether to enhance or more competitively price Plan data products in ways that would compete with the Participant's proprietary data products. While the Commission would expect this information to be disclosed in response to the existing question, the Commission seeks to avoid any doubt and ensure sufficiently detailed responses to the question on this important disclosure.

b. Processor

In the Notice, the Commission asked whether commenters ''have concerns about affiliations between a Plan's Processor and a Participant'' and, if so, whether commenters ''believe the

[49] *Id.* at 4. The commenter stated that ''the questions for Participants, Processors, Administrators and members of the Advisory Committee are not completely sufficient to elicit the necessary information to provide insight into all potential conflicts for an individual.'' *Id.* at 3–4.

[50] *Id.*

[51] In requiring Participants to provide a link to the fee schedules where fees for each product are disclosed, the Commission is not requiring additional information to be disclosed concerning such fees, but rather, to promote accessibility of that information to readers of the conflicts disclosures, is requiring Participants to provide a specific location indicating where Participants currently disclose those fees.

conflicts of interest disclosure is sufficient to address those concerns'' or whether ''the Amendment [should] require a description of the nature of the affiliation.'' [52] In addition, the Commission asked whether commenters ''have concerns about affiliations between a Plan's Processor and a Participant'' and, if so, whether they ''believe the conflicts of interest disclosure is sufficient to address those concerns'' or whether ''the Amendment [should] require a description of the nature of the affiliation.'' [53] Further, the Commission asked whether commenters ''believe that the proposed Processor questions effectively require all material facts necessary to not only identify the nature of the potential conflict, but also the effect it may have on the Plan'' and whether commenters believe the Amendment should ''elaborate on what 'profit or loss responsibility for a Participant's Proprietary Market Data products' means in the context of the required disclosures.'' [54]

The Commission did not receive any comments that specifically addressed the questions raised or alternatives suggested by the Commission, though the commenters discussed above supported enhanced disclosures for all Disclosing Parties.[55]

The Commission believes that it is appropriate to modify the required disclosures of the Processor to require more detailed disclosures relevant to potential conflicts of interest in a manner similar to the modifications it is making for the Administrator. As proposed, the disclosures for the Administrator and the Processor were substantively identical, and the Commission believes that modifying the Processor's disclosures to remain consistent with the Administrator's disclosures keeps with the intent of the proposed Amendments. Like the Administrator, the Processor also is responsible for Plan operations; as a result the proposed conflict of interest disclosures are similar. To keep those disclosures comparable, the Commission is making modifications to the required disclosures for the Processor similar to the modifications it made for the Administrator. First, the Commission is adding to the question requiring the Processor to disclose whether it is affiliated with any Participant additional language to require that the Processor must also ''describe the nature of the affiliation,'' identify the name of the affiliate, and ''[i]nclude an entity-level organizational chart depicting the Processor and its affiliates.'' The Commission believes that merely providing a name of an affiliate without disclosing how the two parties are related to each other is not sufficient. Many different levels of affiliation are possible, and the relationship between the Processor and a Participant is meaningful information that should be disclosed in order to allow the public to assess the impact of the affiliation on the potential conflicts the Processor may face when acting on behalf of the Plan.

In addition, the Commission is modifying the question that requires a narrative description of the functions performed by the manager to also require a similar description for ''senior staff'' that may be senior to the manager but that also provide services in the Processor capacity. By adding senior staff to that question, the disclosures will be able to provide more insight into the parties involved with the Processor function of the Plan including by those persons senior to, and with authority over, the manager.

Second, the Commission is adding to the question on whether the Processor provides any services to the Participant's proprietary market data products, and whether the Processor has profit or loss responsibility for that business, a further requirement for the Processor to disclose ''any other professional involvement with persons the Processor knows are engaged in'' the Participant's proprietary data business and to describe it. The information that a Processor obtains by virtue of its service to the Plan as the Processor can be sensitive non-public information of considerable commercial value. Even if the Processor does not have ''profit or loss responsibility'' for the Participant's proprietary data business, the Processor may have significant professional involvement with other people that do.[56] Any affiliated people in the Participant's proprietary data business with whom the Processor may interact may be incentivized to use information provided by the Processor to the competitive advantage of the Participant and to benefit the Participant's proprietary data business. The Commission therefore is modifying the question to elicit material information that is directly relevant to the potential conflicts of interest faced by the Processor if the Processor has involvement or contact with persons engaged in a Participant's proprietary market data business.

c. Administrator

In the Notice, the Commission asked whether commenters believe the proposed disclosure questions for the Administrator ''are sufficient to identify the specific interests and employment, commercial or other relationships that may give rise to a conflict'' or whether more disclosures and more detailed items should be required.[57]

In response to the Notice, one commenter stated that the proposed disclosures for all Disclosing Parties, including the Administrator, were ''not completely sufficient to elicit the necessary information to provide insight into all potential conflicts for an individual'' and recommended that the disclosures be ''enhanced to elicit responses that provide detailed information about the nature of the conflict, including not only the general role of an individual, but also specific information about that individual's contractual requirements, compensation structures, resource allocations, and information access that may cause a perceived conflict.'' [58]

After considering the comments received in response to the Notice, the Commission believes it is appropriate to enhance the required disclosures of the Administrator. The Commission is modifying the question about whether the Administrator is affiliated with a Participant in the same way that it modified the parallel question about the Processor and is making that modification for the same reasons. Specifically, the Commission is requiring an Administrator that is affiliated with a Participant also (i) to ''describe the nature of the affiliation'' in addition to identifying the name of the affiliate, and (ii) to include ''an entity-level organizational chart depicting the Administrator and its affiliates.'' As is true for the disclosure applicable to the Processor, the Commission believes that merely providing the name of an affiliate without disclosing how the two parties are related to each other is not sufficient

[52] Notice, *supra* note 6, 85 FR at 2206.

[53] *Id.*

[54] *Id.*

[55] *See, e.g.,* TD Ameritrade Letter, *supra* note 24, at 3–4.

[56] With respect to protecting the confidentiality of Plan-related information, the Commission separately is approving modified amendments to address the Plan's confidentiality policy. *See* Securities Exchange Act Release No. 88826 (May 6, 2020). The Commission does not believe that the separate confidentiality amendments obviate the need for these Amendments dealing with conflicts of interest. Rather, the Commission believes that both sets of amendments complement each other and take an important first step towards strengthening the Plan's ability to protect against the potential misuse of confidential Plan information while addressing the potential conflicts of interest inherent in Plan governance.

[57] Notice, *supra* note 6, 85 FR at 2206.

[58] TD Ameritrade Letter, *supra* note 24, at 3–4.

to identify what might give rise to a potential conflict of interest.

In addition, the Commission is modifying the question that requires a narrative description of the functions performed by the administrative services manager to also require a similar description for ''senior staff'' that may be senior to the administrative services manager but that also provide services in the Administrator capacity. By adding senior staff to that question, the disclosures will be able to provide more insight into the parties involved with the administration of the Plan including by those persons senior to, and with authority over, the manager. Further, the Commission is modifying the question that requires disclosure of whether the Plan Administrator has profit or loss responsibility for a Participant's proprietary market data products to also encompass ''licensing responsibility'' for the same to require disclosure of whether the Administrator performs the central task of licensing for the Participant's proprietary market data products, which would overlap substantially with the Administrator's licensing responsibility to a similar customer base. Finally, for the same reasons discussed above for the Processor, the Commission is adding to that same question a further requirement for the Administrator to disclose ''any other professional involvement with persons the Administrator knows are engaged in'' the Participant's proprietary data business and to describe it. This change harmonizes the same question asked of both the Processor and the Administrator, who are similarly situated in when it comes to involvement or contact with persons engaged in a Participant's proprietary market data business.

Administrators have access to highly sensitive and commercially valuable non-public information that would be of substantial value to a Participant's proprietary data business. For example, access to the SIP customer lists that an Administrator has through its responsibilities to the Plan would be very valuable to a Participant. If the staff associated with the Administrator has access to that information and also bears responsibility for the Participant's proprietary market data products, the potential conflict of interest is considerable and should be disclosed. The Commission believes that these modifications to the disclosures applicable to the Administrator are appropriate to provide insight into some of the key potential conflicts of interest faced by the Administrator.[59]

d. Catch-all Question

In the Notice, the Commission solicited comment on whether the Amendment would elicit the information necessary to provide sufficient transparency of the potential conflicts of interest faced by parties involved with operating and overseeing the Plan. Among other things, the Commission asked whether commenters ''believe that the Plan should require additional public disclosures of any personal, business, or financial interests, and any employment or other commercial relationships that could materially affect the ability of a party to be impartial regarding actions of the Plan.'' [60]

In response to the Notice, one commenter suggested that all parties disclose ''any additional relationships, whether personal, employment, or commercially related, which may present a perceived or actual conflict of interest with their assigned role(s) for the Plan(s).'' [61]

After considering the comments received in response to the Notice, the Commission believes it is appropriate to modify the Amendment to include a ''catch-all'' question for each Disclosing Party. The catch-all question asks whether the Disclosing Party or its representative ''have any additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with their responsibilities to the Plan'' and, if so, ''provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.'' [62] This catch-all question would require disclosure of any other relationships or material economic interests, such as employment, financial, or commercial arrangements, not otherwise discussed in the disclosures, but which a reasonable objective observer could perceive as presenting a potential conflict.

The Commission believes that the catch-all question is appropriate as it elicits information broadly on Disclosing Parties and their representatives, which is designed to ensure that no relevant connections are omitted in the disclosures. Further, by covering additional relationships or material economic interests, the catch-all question is designed to ensure that the disclosures have not omitted any other sources of potential conflicts that could affect the Plan. Disclosure of this information may provide valuable insight into potential conflicts that would not otherwise be disclosed and the circumstances behind a potential conflict.

B. Review of the Disclosures

In the Notice, the Commission solicited comment on whether a disclosure-based regime is sufficient to address the potential conflicts that Participants, the Processor, the Administrator, and members of the Advisory Committee may face in their roles within the Plan and whether additional steps are necessary. One additional step the Commission highlighted is the role of the Operating Committee in the disclosure regime. Among other questions, the Commission asked whether commenters believe ''that Operating Committee members should be permitted to raise the issue of a potential conflict of interest of another Participant for discussion before the Operating Committee, even if the Participant did not itself disclose the potential conflict'' and whether the Operating Committee ''should have the ability to take action in response to disclosed or undisclosed conflicts . . . .''

In response to the Notice, one commenter suggested that the Plan should alleviate potential conflicts of interest by ''implementing a formal procedure for evaluating disclosures and making an explicit determination

[59] The Commission believes it is appropriate for the Administrator to make the required disclosures even if it is independent and not owned or controlled by a corporate entity that offers for sale its own proprietary market data product, either directly or via another subsidiary, for the same reasons that other independent parties (*e.g.,* Advisors and service providers) are required to make the disclosures. Among other things, the Administrator's disclosures contain important information about any services provided to Participants' proprietary market data products, policies and procedures to safeguard confidential information, and the catch-all question about additional relationships or material economic interests. *See* Securities Exchange Act Release No. 88827 (May 6, 2020) (ordering the Participants to act jointly in developing and filing with the Commission a proposed new single national market system plan that would, among other things, require an independent Administrator).

[60] Notice, *supra* note 6, 85 FR at 2205.

[61] TD Ameritrade Letter, *supra* note 24, at 6. *See also supra* text accompanying note 40 (discussing TD Ameritrade Letter); *and* Healthy Markets Letter, *supra* note 42, at 18 (stating that the disclosures should be expanded to ''disclose any personal, organizational, or financial relationships'').

[62] For Disclosing Parties that are Participants, the catch-all question extends to an ''alternative representative'' and ''any affiliate'' of the Participant. For Disclosing Parties that are Advisors, the catch-all question extends to the ''Advisor's firm.'' These additions capture specific parties that are unique and relevant to the Participants and Advisors for purposes of the Amendment.

regarding whether the potential conflicts disclosed will, in perception or fact, impede that individual's ability to fulfill their role for the Plan(s).'' [63]

After considering the comments received, the Commission is not modifying the Amendment to institute a formal review process for the disclosures. The disclosures will continue to be publicly posted, and the Participants, Advisors, and others will be able to continue to review the disclosures and amendments thereto. To the extent a party believes that a Disclosing Party has not adequately responded to a particular disclosure item or has not clearly explained the necessary information to disclose a potential conflict, the Commission would encourage Disclosing Parties and other individuals to bring such concerns to the attention of the Operating Committee for its consideration, as Participants would have an interest in promoting a high standard for the disclosures that is consistently applied across all Disclosing Parties. The Commission encourages the Participants to consider further whether to propose a formal review process with appropriate consequences for violations.

C. Recusal

In the Notice, the Commission solicited comment on whether additional steps, including recusal, are necessary to address the potential conflicts that arise in connection with the operation and oversight of the Plan. Among other questions, the Commission asked whether commenters ''believe that a Participant should be recused from voting when it or an affiliate is competing for a contract to serve as a Processor for the Plan.'' [64] The Commission asked whether recusal is ''an appropriate mechanism to address conflicts'' and, if so, whether it should be mandatory or voluntary.[65] The Commission also asked whether ''the Operating Committee should have the ability to take action in response to disclosed or undisclosed conflicts, such as requiring the Participant to recuse itself from a certain discussion or vote on a particular matter.'' [66]

In response to the Notice, the Advisory Committee supports a ''requirement for individuals to recuse themselves from discussions and/or voting when there is a material conflict between the requirement to further the goals of the plan and the specific interest of the individual or their employer.'' [67] In particular, the Advisory Committee recommended mandatory recusal in situations ''regarding processor bids or voting to choose a processor, when the individual's firm is bidding for the processor role.'' [68] The Advisory Committee further suggested that recusal be required when ''either (i) the individual, acting in good faith, or (ii) the Operating Committee, by majority vote, determines that such individual has a material conflict.'' [69]

Another commenter similarly stated that there should be a mechanism for recusal when a ''conflict becomes material,'' such as when the ''Operating Committee is considering selection of a service provider for a SIP, and the participant's firm has a relationship with a bidder.'' [70] The commenter recommended that there should be a ''mechanism for responding to a participant's failure to comply with the disclosure requirement including, if appropriate, dismissal from the Operating Committee.'' [71]

A third commenter suggested that ''there should be a mechanism or process whereby recusal is required from discussion and voting in case of a material conflict of interest.'' [72] The commenter recommended requiring recusal when ''a Participant exchange, or Advisory Committee member's employer could be competing to be a service provider to the Plans such as processor, or auditor.'' [73]

One commenter asserted that ''[d]isclosure of potential conflicts in and of itself does not necessarily mitigate any such conflict or the perception of such conflict.'' [74] The commenter suggested that ''[e]ffectively addressing an individual's conflict of interest, whether perceived or in fact, includes mitigating and/or removing such conflict.'' [75] This commenter advocated for a recusal policy with review of disclosures by a committee composed of both SRO and non-SRO members, guidance from Plan legal counsel, and a vote by the committee.[76] The commenter suggested that individuals may be required to recuse themselves for certain topics or for the tenure of their term depending on the severity of the conflict.[77]

After considering the comments received in response to the Notice, the Commission believes it is appropriate to require mandatory recusal in certain situations. To promote transparency when recusals occur, new Section F.2.d. of the Plan requires that all recusals, including a person's determination of whether to voluntarily recuse himself or herself, be reflected in the applicable meeting minutes. Increased transparency of recusals will allow the public to assess whether Plan decisions have, or have not, been informed by persons subject to potential conflicts of interest.

With respect to specific recusals, the Commission is adding new Section F.2.a. of the Plan to specify that a Disclosing Party ''may not appoint as its representative a person that is responsible for or involved with the development, modeling, pricing, licensing, or sale of proprietary data products offered to customers of a securities information processor if the person has a financial interest (including compensation) that is tied directly to the exchange's proprietary data business and if that compensation would cause a reasonable objective observer to expect the compensation to

[63] TD Ameritrade Letter, *supra* note 24, at 4.

[64] Notice, *supra* note 6, 85 FR at 2205.

[65] *Id.*

[66] *Id.*

[67] Advisory Committee Letter, *supra* note 23, at 2.

[68] *Id. See also* Healthy Markets Letter, *supra* note 42, at 14 (recommending detailed recusal provisions that preclude a person ''from voting on any matter that directly impacts its costs or revenues, or those of its affiliates''); and Letter from John Ramsay, Chief Market Policy Officer, Investors Exchange LLC, to Vanessa Countryman, Secretary, Commission, dated March 4, 2020 (submitted in response to Release No. 34–87906; File No. 4–757).

[69] Advisory Committee Letter, *supra* note 23, at 2.

[70] RBC Letter, *supra* note 46, at 3. *See also* Letter from Rich Steiner Head of Client Advocacy and Market Information, RBC Capital Markets, to Vanessa Countryman, Secretary, Commission, dated February 28, 2020 (submitted in response to Release No. 34–87906; File No. 4–757), at 4 (discussing the need for disclosure of material information, and citing as an example when a Participant has a relationship with a person bidding for a contract with the Plan). As discussed above, the Commission is modifying the Amendment to require a Participant's recusal from voting on matters in which it or its affiliate (i) is seeking a position or contract with the Plan or (ii) has a position or contract with the Plan and whose performance is being evaluated by the Plan. The commenter also believed that the Advisory Committee members should only provide the disclosures on a voluntary basis as they do not currently have voting rights, such that the disclosures should only be mandatory for voting members of the Operating Committee. *See id.* at 2. The Commission, however, believes that Advisors, because they are engaged in Plan business, just like other Disclosing Parties engaged in Plan business, should be required to make the mandatory conflicts of interest disclosures. With such disclosures, other Disclosing Parties and the public can assess whether the Advisors are subject to any conflicts as they carry out their responsibilities with the Plan.

[71] RBC Letter, *supra* note 46, at 3.

[72] Charles Schwab Letter, *supra* note 41, at 4. The commenter stated that ''only a complete separation of functions—true independence—of the Participants from the Administrators and Processors can mitigate the conflict.'' *Id.* The Commission believes that the modifications made are appropriate for this Amendment and is not including this requirement in the Amendment.

[73] *Id.*

[74] TD Ameritrade Letter, *supra* note 24, at 3.

[75] *Id.*

[76] *See id.* at 4.

[77] *See id.*

affect the impartiality of the representative.'' To the extent an exchange that offers proprietary market data products appoints as its representative to the Plans such an individual, that person has an inherent conflict of interest arising from his or her financial interest in the exchange's proprietary data business.

The effect of this requirement is that a Participant will not be able to appoint as its representative a person that has a financial interest (including compensation) that is tied directly to the Participant's proprietary data business if that compensation would cause a reasonable objective observer to expect the compensation to affect the impartiality of the representative. For example, if a person's primary job function is tied directly to the success or growth of proprietary data products, and/or some percentage of a person's compensation is tied directly to the revenues or profits specifically of the exchange's proprietary data business (as opposed to being tied more generally to the Participant's overall revenue), that person could not serve as the Participant's representative if that compensation would cause a reasonable objective observer to expect the compensation to affect the impartiality of the representative. If such person currently serves as the Participant's representative, that person could either no longer serve as the Participant's representative or no longer have such a financial interest that is tied directly to the exchange's proprietary data business.[78]

The Commission believes that the exchanges' commercial interests in their proprietary data businesses, as well as the exchange Administrator's access to confidential subscriber information, create a potential conflict of interest that could influence decisions as to the Plan's operation. In the case where a Participant chooses as its representative a person who has a financial interest (including compensation) that is tied directly to the exchange's proprietary data business, then a reasonable objective observer could question whether the representative is able to act in a manner consistent with the interests of the Plan.[79] In light of this conflict, even if such individuals have the requisite expertise, the Commission believes that it is appropriate to prohibit a Disclosing Party from appointing such individuals as its representative to the Plan.[80]

The Commission is further modifying Section F.2. of the Plan by setting forth the following scenarios in which recusal will be required. First, a Disclosing Party will be ''recused from participating in Plan activities if it has not submitted a required disclosure form or the Operating Committee votes that its disclosure form is materially deficient.''[81] Such recusal will be in effect until the Disclosing Party submits a sufficiently complete disclosure form to the Administrator. Consistent with the comments discussed above, this provision imposes a mechanism to recuse a representative due to a Disclosing Party's complete failure to comply with the disclosure requirements. For other cases where the disclosures are made but found to be materially deficient by vote of the Operating Committee, recusal also would be appropriate as an incentive for Disclosing Parties to carefully prepare their disclosures and ensure that they are not materially deficient.

In either case, these bases for recusal could be readily cured by the recused party submitting a new or updated disclosure that is complete in providing responses to all required items. Thus, the recusal could be lifted by the party's submission of an updated disclosure, though the Operating Committee could potentially again vote that the disclosure form is materially deficient if it decides the Disclosing Party did not rectify the material deficiency. The Commission believes that these requirements provide a consequence for failure to file a required disclosure or for filing a disclosure that the Operating Committee votes to be materially deficient, and therefore should promote both timely filings and consistency in the quality of disclosures across Disclosing Parties.

Second, the Commission is adopting a requirement for a Disclosing Party to be recused from voting on matters, in which it or its affiliate (i) is seeking a position or contract with the Plan or (ii) has a position or contract with the Plan and whose performance is being evaluated by the Plan. In both cases, the Commission believes recusal is appropriate because the conflict of interest, real or perceived, between the Disclosing Party's interests and the interest of the Plan would be so material and potentially irreconcilable that a reasonable objective observer would question the party's ability to be impartial and not favor its own interests. Exchanges face considerable potential conflicts as a result of their dual role of serving, or competing to serve, as operators of the SIPs while simultaneously serving as a Participant that participates in the discussion of, and ultimately votes on, the selection and performance of such parties. The Commission believes that recusal in those situations is appropriate because the conflict of interest in those scenarios is so pronounced, and the Disclosing Party and its affiliates are so materially conflicted, that their participation and vote on the matter cannot be impartial and additional measures are needed in those scenarios.

IV. Commission Findings

For the reasons discussed throughout, the Commission finds that the proposed Amendment to the Plan, as modified by the Commission, is consistent with the requirements of the Act and the rules and regulations thereunder, and in particular, Section 11A of the Act[82] and Rule 608[83] thereunder in that it is necessary or appropriate in the public interest, for the protection of investors and the maintenance of fair and order markets, to remove impediments to, and perfect the mechanisms of, a national market system.

Section 11A of the Act[84] sets forth Congress' finding that it is in the public interest and appropriate for the protection of investors and the maintenance of fair and orderly markets to ensure the prompt, accurate, reliable and fair collection, processing, distribution, and publication of information with respect to quotations

[78] This requirement is not designed to impact or reduce the amount of any person's overall compensation, but rather to ensure that the Participants do not choose as their representatives individuals who receive compensation that is directly linked to proprietary market data products.

[79] For example, a Participant's representative whose compensation is tied directly to the Participant's proprietary market data business could face a conflict of interest that is not possible to sufficiently mitigate when working on Plan initiatives that could potentially result in lower revenues for the Participant's proprietary data business, such as SIP fee reductions or expansions in SIP core data content that match what the Participant provides in some of its proprietary market data products. Those Plan initiatives could result in lower revenues for the Participant's proprietary data business, which would correspondingly reduce the representative's compensation that is tied directly to that business.

[80] While a Participant could not appoint such person as its representative to the Plan, it could utilize such person in other capacities involving Plan business, such as the Processor role.

[81] While the Operating Committee does not have an affirmative responsibility to review each disclosure document and updates thereto in the ordinary course, it may elect to do so, including, for example, in instances where it has reason to suspect a disclosure may be materially deficient, and the Operating Committee may determine the best procedure for undertaking or completing such a review. The ability of the Operating Committee to undertake this review and vote on the matter is appropriate as a mechanism to ensure that Disclosing Parties submit clear and complete disclosures.

[82] 15 U.S.C. 78k–1.

[83] 17 CFR 240.608.

[84] 15 U.S.C. 78k–1(c)(1)(B).

for and transactions in such securities and the fairness and usefulness of the form and content of such information. The conflicts of interest Amendment, as modified by the Commission, furthers these goals set forth by Congress.

V. Conclusion

It is therefore ordered, pursuant to Section 11A of the Act,[85] and the rules thereunder, that the proposed Amendment to the Nasdaq/UTP Plan (File No. S7–24–89), as modified by the Commission, is approved.

By the Commission.

J. Matthew DeLesDernier,

Assistant Secretary.

EXHIBIT A

MARKED TO SHOW CHANGES FROM THE PROPOSAL

The Commission's additions are *italicized;* deletions are [bracketed].

UTP PLAN

IV. Administration of Plan

A.–E. No change.

F. [Disclosure of]Potential Conflicts of Interests

[(a)]*1.* Disclosure Requirements. The Participants, the Processor, the Plan Administrator, [and]members of the Advisory Committee*, and each service provider or subcontractor engaged in Plan business (including the audit of subscribers' data usage) that has access to Restricted or Highly Confidential Plan information* (for purposes of this section, ''Disclosing Parties'') shall complete the applicable questionnaire [attached to this UTP Plan as Exhibit 3]*to provide the required disclosures set forth below to disclose all material facts necessary to identify potential conflicts of interest. The Operating Committee, a Participant, Processor, or Administrator may not use a service provider or subcontractor on Plan business unless that service provider or subcontractor has agreed in writing to provide the disclosures required by this section and has submitted completed disclosures to the Administrator prior to starting work. If state laws, rules, or regulations, or applicable professional ethics rules or standards of conduct, would act to restrict or prohibit a Disclosing Party from making any particular required disclosure, a Disclosing Party shall refer to such law, rule, regulation, or professional ethics rule or standard and include in response to that disclosure the basis for its inability to provide a complete response. This does not relieve the Disclosing Party from disclosing any information it is not restricted from providing.*

a. A potential conflict of interest may exist when personal, business, financial, or employment relationships could be perceived by a reasonable objective observer to affect the ability of a person to be impartial.

[(b)]*b.* Updates to Disclosures. Following a material change in the information disclosed pursuant to subparagraph (a), a Disclosing Party shall promptly update its disclosures. Additionally, a Disclosing Party shall update annually any inaccurate information prior to the Operating Committee's first quarterly meeting of a calendar year.

[(c)]*c.* Public Dissemination of Disclosures. The Disclosing Parties shall provide the Administrator with its disclosures and any required updates. The Administrator shall ensure that the disclosures are promptly posted to the Plan's website.

2. Recusal

a. A Disclosing Party may not appoint as its representative a person that is responsible for or involved with the development, modeling, pricing, licensing, or sale of proprietary data products offered to customers of a securities information processor if the person has a financial interest (including compensation) that is tied directly to the exchange's proprietary data business and if that compensation would cause a reasonable objective observer to expect the compensation to affect the impartiality of the representative.

b. A Disclosing Party (including its representative(s), employees, and agents) will be recused from participating in Plan activities if it has not submitted a required disclosure form or the Operating Committee votes that its disclosure form is materially deficient. The recusal will be in effect until the Disclosing Party submits a sufficiently complete disclosure form to the Administrator.

c. A Disclosing Party, including its representative(s), and its affiliates and their representative(s), are recused from voting on matters in which it or its affiliate (i) are seeking a position or contract with the Plan or (ii) have a position or contract with the Plan and whose performance is being evaluated by the Plan.

d. All recusals, including a person's determination of whether to voluntarily recuse himself or herself, shall be reflected in the meeting minutes.

* * * * *

Required Disclosures for the UTP Plan

As part of the disclosure regime, [the Participants propose that]the Participants, the Processors, the Administrators, [and]members of the Advisory Committee*, and service providers and subcontractors must* respond to questions that are tailored to elicit responses that disclose the potential conflicts of interest.

The [Participants propose that the]Participants *must* respond to the following questions and instructions:

- Is the Participant's firm for profit or not-for-profit? If the Participant's firm is for profit, is it publicly or privately owned? If privately owned, list any owner with an interest of 5% or more of the Participant, where to the Participant's knowledge, such owner, or any affiliate controlling, controlled by, or under common control with the owner, subscribes, directly or through a third-party vendor, to SIP and/or exchange Proprietary Market Data products.
- Does the Participant firm offer real-time proprietary equity market data that is filed with the SEC (''Proprietary Market Data'')? If yes, *list each product, describe its content, and provide a link to where fees for each product are disclosed.*[does the firm charge a fee for such offerings?]
- Provide the names of the representative and any alternative representatives designated by the Participant who are authorized under the Plans to vote on behalf of the Participant. Also provide a narrative description of the representatives' roles within the Participant organization, including the title of each individual as well as any direct responsibilities related to the development, dissemination, sales, or marketing of the Participant's Proprietary Market Data, and the nature of those responsibilities *sufficient for the public to identify the nature of any potential conflict of interest that could be perceived by a reasonable objective observer as having an effect on the Plan. If the representative works in or with the Participant's Proprietary Market Data business, describe the representative's roles and describe how that business and the representative's Plan responsibilities impacts his or her compensation. In addition, describe how a representative's responsibilities with the Proprietary Market Data business may present a conflict of interest with his or her responsibilities to the Plan.*
- *Does the Participant, its representative, or its alternative representative, or any affiliate have*

[85] 15 U.S.C. 78k–1.

additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with their responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.

The [Participants propose that the]Processors *must* respond to the following questions and instructions:

• Is the Processor an affiliate of or affiliated with any Participant? If yes, disclose the Participant(s) *and describe the nature of the affiliation. Include an entity-level organizational chart depicting the Processor and its affiliates.*[?]

• Provide a narrative description of the functions directly performed by *senior staff,* the manager employed by the Processor to provide Processor services to the Plans, and the staff that reports to that manager (collectively, the ''Plan Processor'').

• Does the Plan Processor provide any services for any Participant's Proprietary Market Data products or other Plans? If Yes, disclose the services the Plan Processor performs and identify which Plans. Does the Plan Processor have any profit or loss responsibility for a Participant's Proprietary Market Data products *or any other professional involvement with persons the Processor knows are engaged in the Participant's Proprietary Market Data business? If so, describe.*

• List the policies and procedures established to safeguard confidential Plan information that is applicable to the Plan Processor.

• *Does the Processor, or its representatives, have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with the representatives' responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

The [Participants propose that the]Administrators *must* respond to the following questions and instructions:

• Is the Administrator an affiliate of or affiliated with any Participant? If yes, *disclose the*[which] Participant*(s) and describe the nature of the affiliation. Include an entity-level organizational chart depicting the Administrator and its affiliates.*[?]

• Provide a narrative description of the functions directly performed by *senior staff, the* administrative services manager, and the staff that reports to that manager (collectively, the ''Plan Administrator'').

• Does the Plan Administrator provide any services for any Participant's Proprietary Market Data products? If yes, what services? Does the Plan Administrator have any profit or loss responsibility*, or licensing responsibility,* for a Participant's Proprietary Market Data products *or any other professional involvement with persons the Administrator knows are engaged in the Participant's Proprietary Market Data business*? *If so, describe.*

• List the policies and procedures established to safeguard confidential Plan information that is applicable to the Plan Administrator.

• *Does the Administrator, or its representatives, have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with the representatives' responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

The [Participants propose that the]Members of the Advisory Committee *must* respond to the following questions and instructions:

• Provide the Advisor's title and a brief description of the Advisor's role within the firm.

• Does the Advisor have responsibilities related to the firm's use or procurement of market data?

• Does the Advisor have responsibilities related to the firm's trading or brokerage services?

• Does the Advisor's firm use the SIP? Does the Advisor's firm use exchange Proprietary Market Data products?

• Does the Advisor's firm have an ownership interest of 5% or more in one or more Participants? If yes, list the Participant(s).

• Does the Advisor actively participate in any litigation against the Plans?

• *Does the Advisor or the Advisor's firm have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with their responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

Pursuant to Section IV.F.1. of the Plan, each service provider or subcontractor that has agreed in writing to provide required disclosures and be treated as a Disclosing Party pursuant to Section IV.F of the Plan shall respond to the following questions and instructions:

• *Is the service provider or subcontractor affiliated with a Participant, Processor, Administrator, or member of the Advisory Committee? If yes, disclose with whom the person is affiliated and describe the nature of the affiliation.*

• *If the service provider's or subcontractor's compensation is on a commission basis or is tied to specific metrics, provide a detailed narrative summary of how compensation is determined for performing work on behalf of the Plan.*

• *Is the service provider or subcontractor subject to policies and procedures (including information barriers)* concerning the protection of confidential *information that includes affiliates? If so, describe. If not, explain their absence.*

• *Does the service provider or subcontractor, or its representative, have additional relationships or material economic interests that could be perceived by a reasonable objective observer to present a potential conflict of interest with its responsibilities to the Plan? If so, provide a detailed narrative discussion of all material facts necessary to identify the potential conflicts of interest and the effects they may have on the Plan.*

The [Participants will post the]responses to these questions *will be posted* on the Plan's website. If a Disclosing Party has any material changes in its responses, the Disclosing Party must promptly update its disclosures. Additionally, the Disclosing Parties *must*[will] update the disclosures on an annual basis to reflect any changes. This annual update must be made before the first quarterly session meeting of each calendar year, which is generally held in mid-February.

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SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–88816; File No. SR–CBOE–2020–041]

Self-Regulatory Organizations; Cboe Exchange, Inc.; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change Relating To Amend Its Definition of Bulk Messages in Rule 1.1 and Amend Rule 5.5(c)(3)

May 6, 2020.

Pursuant to 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 24, 2020, Cboe Exchange, Inc. (the ''Exchange'' or ''Cboe Options'') filed with the Securities and Exchange Commission (''Commission'') the 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

Cboe Exchange, Inc. (the ''Exchange'' or ''Cboe Options'') proposes to amend its definition of bulk messages in Rule 1.1 and amend Rule 5.5(c)(3). The text of the proposed rule change is provided in Exhibit 5.

The text of the proposed rule change is also available on the Exchange's website (*http://www.cboe.com/AboutCBOE/CBOELegalRegulatoryHome.aspx*), at the Exchange's Office of the Secretary, 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.

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange proposes to amend its rules in connection with bulk message functionality to offer this functionality exclusively to Market-Makers on the Exchange. Currently, Cboe Options Market-Makers generally submit their quotes electronically using bulk messages. A bulk message is a single electronic message a User may submit to the Exchange in which the User may enter, modify, or cancel up to an Exchange-specified number of bids and offers. Bulk message functionality was adopted by the Exchange in connection with a recent technology migration and made available to all Users in place of the Exchange's prior quoting functionality, which was available only to Market-Makers and permitted them to update their electronic quotes in block quantities.[3] Currently, the definition of a bulk message in Rule 1.1 provides that a User may submit a bulk message through a bulk port, which is a dedicated logical port. Current Rule 5.5(c)(3) provides that a bulk message submitted through a logical port is subject to the following: (1) It has a Time-in-Force of Day; (2) a Market-Maker with an appointment in a class may designate a bulk message for that class as Post Only or Book Only, and other Users must designate a bulk message for that class as Post Only; and (3) a User may establish a default MTP Modifier of MCN, MCO, or MCB, and a default value of Attributable or Non-Attributable, for a bulk port, each of which applies to all bulk messages submitted to the Exchange through that bulk port. Additionally, Users may submit single orders through a bulk port in the same manner as Users may submit orders to the Exchange through any other type of port, including designated with any order instruction and any time-in-force,[4] and as auction responses (using auction response messages). The primary purpose of bulk ports and bulk messages is to encourage liquidity provision, particularly by Market-Makers, on the Exchange.[5]

[3] *See* Securities Exchange Release No. 86374 (July 15, 2019) 84 FR 34963 (July 19, 2019) (SR–CBOE–2019–033).

[4] A Market-Maker with an appointment in a class may designate an order for that class submitted through a bulk port only as Post Only or Book Only, and other Users must designate an order for that class submitted through a bulk port as Post Only. *See* Rule 5.5(c)(3)(B).

[5] *See supra* note 3.

The Exchange proposes to amend the definition of bulk messages in Rule 1.1 so that Market-Makers may exclusively submit bulk messages (the same quotation functionality that was prior offered exclusively to Market-Makers up until October 2019[6]) and proposes to update Rule 5.5(c)(3) regarding bulk ports accordingly. Specifically, the proposed rule change amends the definition of bulk messages to provide that the term ''bulk message'' means a single electronic message a User submits with an M Capacity (*i.e.,* for the account of a Market-Maker) to the Exchange in which the User may enter, modify, or cancel up to an Exchange-specified number of bids and offers. In this way, the bulk messages submitted through bulk ports would be attributed only to Market-Maker quotes. In line with the proposed amendment to the User Capacity permitted to submit bulk messages, the proposed rule change also updates Rule 5.5(c)(3)(A)(ii) to provide that, while a Market-Maker with an appointment in a class may designate a bulk message for that class as a Post Only or Book Only, a non-appointed Market-Maker, as opposed to any other User, must designate a bulk message for that class as Post Only. This is currently the case for Market-Makers submitting bulk messages in non-appointed classes and the proposed rule change merely reflects the specific type of other User (*i.e.,* Market-Makers not appointed in a class) that will be able to submit bulk messages. The Exchange also notes that the proposed rule change updates the term User to Market-Maker in Rule 5.5(c)(3)(A)(iii) to reflect the proposed amendment to the User Capacity permitted to submit bulk messages and provide uniformity for the terms used throughout Rule 5.5(c)(3)(A).

The Exchange notes that the vast majority of bulk messages submitted through bulk ports are for the account of a Market-Maker. Indeed, over the second half of March 2020 the Exchange observed that no non-Market-Makers submitted bulk messages through bulk ports. Because so few non-Market-Maker Users opt to use this functionality, the Exchange believes that the current demand does not warrant the Exchange resources necessary for ongoing System support for non-Market-Maker bulk messaging. The Exchange notes that the use of bulk messages is voluntary and non-Market-Maker Users will continue to be able to submit their single orders and auction responses through bulk ports and other logical ports in the same manner as they currently do.

[6] *See id.*

The Exchange notes that limiting the offering of quoting functionality to Market-Makers is not new or unique as other options exchanges currently offer quoting functionality only to their market makers.[7] Indeed, bulk message functionality (including submission through bulk ports) is geared toward encouraging Market-Maker quoting on the Exchange. For example, the requirement that bulk messages have a time-in-force of Day is intended to be consistent with a Market-Maker's obligation to update its quotes in response to changed market conditions in its appointed classes, and the provision that allows Market-Makers to designate their bulk messages as Post Only or Book Only (as opposed to the limitation to Post Only for other Users' bulk messages) is intended to provide Market-Makers with flexibility to use these instructions with respect to their bulk messages as additional tools to meet their quoting obligations in a manner they deem appropriate.[8] Additionally, as noted above, the Exchange offered quote message functionality (which was substantially similar to current bulk message functionality) only to Market-Makers until October 7, 2019.

2. Statutory Basis

The Exchange believes the proposed rule change is consistent with the Securities Exchange Act of 1934 (the ''Act'') and the rules and regulations thereunder applicable to the Exchange and, in particular, the requirements of Section 6(b) of the Act.[9] Specifically, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[10] requirements that the rules of an exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. Additionally, the Exchange believes the proposed rule change is consistent with the Section 6(b)(5)[11] requirement that the rules of an exchange not be designed to permit unfair discrimination between customers, issuers, brokers, or dealers.

In particular, the Exchange believes that the proposed rule change will remove impediments to and perfect the mechanism of a free and open market and national market system and benefit investors, because it will delete from the Rules a functionality that is currently unused and as a result, the Exchange will no longer offer, thereby promoting transparency in its Rules. The Exchange notes that other options exchanges currently offer their quoting functionality and/or interfaces exclusively to market makers on their exchanges.[12] Additionally, as noted above, the Exchange only offered quote message functionality (which corresponds to bulk message functionality) until approximately six months ago. Moreover, the Exchange does not believe that the proposed rule change raises any new or novel issues for Users and will not affect the protection of investors and the public interest because this functionality is not currently used by non-Market-Makers. In addition to this, the Exchange notes that the submission of bulk messages to the Exchange is voluntary, and, as stated, non-Market-Makers will continue to be able to submit single order and auction responses through bulk ports and other logical ports to connect to the Exchange and enter orders, receive date, and access information. Also, the Exchange believes that the low non-Market-Maker usage rate of bulk message functionality does not warrant the continued resources necessary for System support of bulk messaging for non-Market-Maker Users. As a result, the Exchange believes the proposed rule change will also remove impediments to and perfect the mechanism of a free and open market and national market system by allowing the Exchange to reallocate System capacity and resources to other System functionality, which benefits all market participants.

Additionally, the Exchange does not believe that the proposed rule change would permit unfair discrimination as, according to March 2020 data, non-Market-Makers are not submitting bulk messages to the Exchange, and, as stated above, bulk message functionality is principally designed to assist Market-Makers in providing liquidity to the Exchange. The options market is driven by Market-Maker quotes, and thus Market-Maker quotes are critical to provide liquidity to the market and contribute to price discovery for investors. Additionally, Market-Makers are subject to continuous quoting obligations (which other Users are not), and bulk message functionality provides Market-Makers with a means to help them satisfy these obligations. Indeed, when bulk messages were adopted, the Exchange expected Market-Makers regularly to use bulk messages to input and update prices on multiple series of options at the same time, and noted that the functionality was intended primarily for the use of Market-Makers.[13]

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule change will impose any burden on competition that is not necessary or appropriate in furtherance of the purposes of the Act. The Exchange does not believe that the proposed rule change will change will impose any burden on intramarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because bulk messages functionality will be available for all Exchange Market-Makers in the same manner as it is today. Non-Market-Makers will continue to be able to submit their single orders and auction responses through bulk ports, as well as all orders and other data through logical ports, in the same manner as they currently do. As noted above, this is consistent with the primary purpose of bulk messages, which is to encourage Market-Maker quoting and liquidity on the Exchange. The Exchange further notes that if any non-Market-Makers wish to submit liquidity to the Exchange using bulk messages they are free to register as an Exchange Market-Maker and choose the appointed classes in which they wish to quote. Non-Market-Makers currently do not use bulk message functionality, so the proposed rule change is not expected to have any impact on their business need.

The Exchange does not believe that the proposed rule change will impose any burden on intermarket competition that is not necessary or appropriate in furtherance of the purposes of the Act because other options exchanges currently limit their quoting functionality and/or interface to market makers on their exchanges.[14] As noted above, the Exchange similarly limited quoting functionality (which corresponds to bulk message

[7] *See* Nasdaq Phlx Options 1, Section 7(a)(B), which provides for its ''Specialized Quote Feed'', a quoting interface offered specifically to market makers on Phlx; *and see generally* MIAX Options Rule 517, which provide for the different types of quotes and quoting mechanisms offered specifically to market makers on MIAX Options.

[8] *See supra* note 3.

[9] 15 U.S.C. 78f(b).

[10] 15 U.S.C. 78f(b)(5).

[11] *Id.*

[12] *See supra* note 7.

[13] *See id.*

[14] *See supra* note 7.

functionality) to Market-Makers until approximately six months ago.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

The Exchange neither solicited nor received comments on the proposed rule change.

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)(iii) of the Act [15] and subparagraph (f)(6) of Rule 19b–4 thereunder.[16]

A proposed rule change filed pursuant to Rule 19b–4(f)(6) under the Act [17] normally does not become operative for 30 days after the date of its filing. However, Rule 19b–4(f)(6)(iii) [18] 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 asked the Commission to waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Commission believes that waiving the 30-day operative delay is consistent with the protection of investors and the public interest. The Exchange represents that it disseminated advance notice of the proposed change to market participants on March 27, 2020 and plans to announce a specific implementation date in the near future. In addition, the Exchange states that the proposal is consistent with quoting functionality on other options exchanges which currently offer such functionality only to their market makers. The Commission notes that the proposed rule change does not present any unique or novel regulatory issues. Accordingly, the Commission hereby waives the operative delay and designates the proposal operative upon filing.[19]

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is: (i) Necessary or appropriate in the public interest; (ii) for the protection of investors; or (iii) 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 (*http://www.sec.gov/rules/sro.shtml);* or
- Send an email to *rule-comments@sec.gov. Please include File Number SR–CBOE–2020–041 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–CBOE–2020–041. 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 (*http://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 10:00 a.m. and 3:00 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly. All submissions should refer to File Number SR–CBOE–2020–041 and should be submitted on or before June 2, 2020.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[20]

J. Matthew DeLesDernier,

Assistant Secretary.

[FR Doc. 2020–10054 Filed 5–11–20; 8:45 am]

BILLING CODE 8011–01–P

[15] 15 U.S.C. 78s(b)(3)(A)(iii).

[16] 17 CFR 240.19b–4(f)(6). In addition, Rule 19b–4(f)(6) requires a self-regulatory organization to give the Commission written notice of its intent to file 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 Commission has waived the five-day prefiling requirement in this case.

[17] 17 CFR 240.19b–4(f)(6).

[18] 17 CFR 240.19b–4(f)(6)(iii).

[19] 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).

[20] 17 CFR 200.30–3(a)(12).

DEPARTMENT OF STATE

Public Notice 11108]

30-Day Notice of Proposed Information Collection: Medical Clearance Update

ACTION: Notice of request for public comment and submission to OMB of proposed collection of information.

SUMMARY: The Department of State has submitted the information collection described below to the Office of Management and Budget (OMB) for approval. In accordance with the Paperwork Reduction Act of 1995 we are requesting comments on this collection from all interested individuals and organizations. The purpose of this Notice is to allow 30 days for public comment.

DATES: Submit comments up to June 11, 2020.

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 particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function.

FOR FURTHER INFORMATION CONTACT: Direct requests for additional information regarding the collection listed in this notice, including requests for copies of the proposed collection instrument and supporting documents to: Karl Field, Medical Director, Office of Medical Clearances, Bureau of

Medical Services, 2401 E Street NW, SA–1, Room L–101, Washington, DC 20522–0101, and who may be reached at 202–663–1591 or at *Fieldke@state.gov.*

SUPPLEMENTARY INFORMATION:

- *Title of Information Collection:* Medical Clearance Update.
- *OMB Control Number:* 1405–0131.
- *Type of Request:* Revision of a Currently Approved Collection.
- *Originating Office:* Bureau of Medical Services (MED).
- *Form Number:* DS–3057.
- *Respondents:* Contractors and eligible family members.
- *Estimated Number of Respondents:* 7,205.
- *Estimated Number of Responses:* 7,205.
- *Average Time per Response:* 30 minutes.
- *Total Estimated Burden Time:* 3,603 hours.
- *Frequency:* As needed.
- *Obligation to Respond:* Mandatory.

We are soliciting public comments to permit the Department to:

- Evaluate whether the proposed information collection is necessary for the proper functions of the Department.
- 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.
- Enhance the quality, utility, and clarity of the information to be collected.
- Minimize the reporting burden on those who are to respond, including the use of automated collection techniques or other forms of information technology.

Please note that comments submitted in response to this Notice are public record. Before including any detailed personal information, you should be aware that your comments as submitted, including your personal information, will be available for public review.

Abstract of Proposed Collection

Form DS–3057 is designed to collect medical information to provide medical providers with current and adequate information to base decisions on whether contractors and eligible family members will have sufficient medical resources at a diplomatic mission abroad to maintain the health and fitness of the individual and family members.

Methodology

The respondent will obtain the DS–3057 form from their human resources representative or download the form from a Department website. The respondent will complete and submit the form offline.

Karl Field,

Director of Medical Clearances.

[FR Doc. 2020–10084 Filed 5–11–20; 8:45 am]

BILLING CODE 4710–36–P

DEPARTMENT OF STATE

[Public Notice: 11109]

Determination Under Section 620G(b) of the Foreign Assistance Act of 1961

Pursuant to section 620G(b) of the Foreign Assistance Act of 1961 (FAA), Executive Order 12163, as amended by Executive Order 13346, and Delegation of Authority No. 245–2, I hereby determine that furnishing assistance to the governments of Israel, Japan, Spain, and South Korea is important to the national interests of the United States and thereby waive, with respect to these governments, the application of section 620G(a) of the FAA.

This Determination shall be published in the **Federal Register** and, along with the accompanying Memorandum of Justification, shall be reported to Congress.

Dated: April 27, 2020.

Stephen E. Biegun,

Deputy Secretary of State.

[FR Doc. 2020–10117 Filed 5–11–20; 8:45 am]

BILLING CODE 4710–26–P

DEPARTMENT OF STATE

[Public Notice: 11112]

60-Day Notice of Proposed Information Collection: Medical History and Examination

ACTION: Notice of request for public comment.

SUMMARY: The Department of State is seeking Office of Management and Budget (OMB) approval for the information collection described below. In accordance with the Paperwork Reduction Act of 1995, we are requesting comments on this collection from all interested individuals and organizations. The purpose of this notice is to allow 60 days for public comment preceding submission of the collection to OMB.

DATES: The Department will accept comments from the public up to July 13, 2020.

ADDRESSES: You may submit comments by any of the following methods:

- *Web:* Persons with access to the internet may comment on this notice by going to *www.Regulations.gov.* You can search for the document by entering ''Docket Number: DOS–2020–0020'' in the Search field. Then click the ''Comment Now'' button and complete the comment form.
- *Email: Fieldke@state.gov.*
- *Regular Mail:* Send written comments to: Medical Director, Office of Medical Clearances, Bureau of Medical Services, 2401 E Street NW, SA–1, Room L–101, Washington, DC 20522–0101.
- *Fax:* 202–647–0292, Attention: Medical Clearance Director.

You must include the DS form number (if applicable), information collection title, and the OMB control number in any correspondence.

FOR FURTHER INFORMATION CONTACT: Direct requests for additional information regarding the collection listed in this notice, including requests for copies of the proposed collection instrument and supporting documents, should be sent to Karl Field, Director of Medical Clearances at 202–663–1591 or *Fieldke@state.gov.*

SUPPLEMENTARY INFORMATION:

- *Title of Information Collection:* Medical History and Examination.
- *OMB Control Number:* 1405–0068.
- *Type of Request:* Revision of a Currently Approved Collection.
- *Originating Office:* Bureau of Medical Services—Medical Clearances Department.
- *Form Numbers:* DS–1843 and DS–1622.
- *Respondents:* Contractors and eligible family members.
- *Estimated Number of Respondents:* 2,039.
- *Estimated Number of Responses:* 2,039.
- *Average Time per Response:* 1 hour.
- *Total Estimated Burden Time:* 2,039 hours.
- *Frequency:* Upon application for an overseas position and then intermittent, as needed.
- *Obligation to Respond:* Required to Obtain or Retain a Benefit.

We are soliciting public comments to permit the Department to:

- Evaluate whether the proposed information collection is necessary for the proper functions of the Department.
- 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.
- Enhance the quality, utility, and clarity of the information to be collected.
- Minimize the reporting burden on those who are to respond, including the

use of automated collection techniques or other forms of information technology.

Please note that comments submitted in response to this Notice are public record. Before including any detailed personal information, you should be aware that your comments as submitted, including your personal information, will be available for public review.

Abstract of Proposed Collection

Forms DS–1843 and DS–1622 collect medical history, lab tests, and physical examinations for all individuals applying for overseas positions, including their eligible family members. Forms DS–1843 and DS–1622 are designed to collect sufficient and current medical information on the individual in order for a medical provider to make a medical clearance determination for initial appointment to an overseas assignment. They are also used to determine whether the individual or eligible family member will have appropriate medical and/or educational resources at a diplomatic mission/host country abroad to maintain the health and safety of the individual or family member. The forms were updated to include questions regarding employment agency information for non-foreign service agencies. Once the collection instruments have been approved, the DS–1843/1622 can be used by respondents employed by both foreign and non-foreign service agencies, rendering the DS–6561 form redundant. As a result, the DS–6561 would be discontinued upon OMB approval of the revised DS–1843 and DS–1622 forms.

Methodology

The respondent will obtain the DS–1843 and DS1622 forms from their human resources representative or download the forms from a Department website. The respondent will complete and submit the forms offline.

Karl Field,

Director of Medical Clearances.

[FR Doc. 2020–10083 Filed 5–11–20; 8:45 am]

BILLING CODE 4710–36–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Notice of Request To Release Airport Property for Land Disposal at the Ankeny Regional Airport (IKV), Ankeny, Iowa

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of request to rule on release of airport property for land disposal.

SUMMARY: The FAA proposes to rule and invites public comment on the release of land at the Ankeny Regional Airport (IKV), Ankeny, Iowa.

DATES: Comments must be received on or before June 11, 2020.

ADDRESSES: Comments on this application may be mailed or delivered to the FAA at the following address: Amy J. Walter, Airports Land Specialist, Federal Aviation Administration, Airports Division, ACE–620G, 901 Locust, Room 364, Kansas City, MO 64106.

In addition, one copy of any comments submitted to the FAA must be mailed or delivered to: Paul Moritz, Polk County Aviation Authority, Ankeny City Hall, 410 West 1st Street, Ankeny, Iowa 50039, (515) 965–6420.

FOR FURTHER INFORMATION CONTACT: Amy J. Walter, Airports Land Specialist, Federal Aviation Administration, Airports Division, ACE–620G, 901 Locust, Room 364, Kansas City, MO 64106, (816) 329–2603, *amy.walter@faa.gov.* The request to release property may be reviewed, by appointment, in person at this same location.

SUPPLEMENTARY INFORMATION: The FAA invites public comment on the request to release one tract of land consisting of approximately 16.06 acres of airport property at the Ankeny Regional Airport (IKV) under the provisions of 49 U.S.C. 47107(h)(2). On February 12, 2020, the Attorney for the Polk County Aviation Authority requested a release from the FAA to sell a tract of land, 16.06 acres. Buyer, Van Houweling Property LLC, will use the land for development. On May 4, 2020, the FAA determined that the request to release property at the Ankeny Regional Airport (IKV) submitted by the Sponsor meets the procedural requirements of the Federal Aviation Administration and the release of the property does not and will not impact future aviation needs at the airport. The FAA may approve the request, in whole or in part, no sooner than thirty days after the publication of this notice.

The following is a brief overview of the request:

The Ankeny Regional Airport (IKV) is proposing the release of airport property containing 16.06 acres, more or less. The release of land is necessary to comply with Federal Aviation Administration Grant Assurances that do not allow federally acquired airport property to be used for non-aviation purposes. The sale of the subject property will result in the land at the Ankeny Regional Airport (IKV) being changed from aeronautical to non-aeronautical use and release the lands from the conditions of the Airport Improvement Program Grant Agreement Grant Assurances in order to dispose of the land. In accordance with 49 U.S.C. 47107(c)(2)(B)(i) and (iii), the airport will receive fair market value for the property, which will be subsequently reinvested in another eligible airport improvement project for general aviation use.

Any person may inspect, by appointment, the request in person at the FAA office listed above under **FOR FURTHER INFORMATION CONTACT**. In addition, any person may, upon appointment and request, inspect the application, notice and other documents determined by the FAA to be related to the application in person at the Ankeny City Hall.

Issued in Kansas City, MO on May 4, 2020.

James A. Johnson,

Director, FAA Central Region, Airports Division.

[FR Doc. 2020–10080 Filed 5–11–20; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

[Docket No. 2020–0488]

Agency Information Collection Activities: Requests for Comments; Clearance of a New Approval of Information Collection: Survey of Unmanned-Aircraft-Systems Operators

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, FAA invites public comments about our intention to request the Office of Management and Budget (OMB) approval for a new information collection. This survey is necessary to prepare and plan for the integration of unmanned aircraft systems (UAS) into the national airspace system (NAS), as required by Section 376 under the FAA Reauthorizations Act of 2018.

DATES: Written comments should be submitted by July 14, 2020.

ADDRESSES: Please send written comments:

- *By Electronic Docket: www.regulations.gov* (Enter docket number into search field).

• *By mail:* William Ekins, 800 Independence Ave. SW, Suite 938, Washington, DC 20024.

• *By fax:* 202- 267–3278.

FOR FURTHER INFORMATION CONTACT: William Ekins by email at: *William.g.ekins@faa.gov;* phone: 202–267–4735.

SUPPLEMENTARY INFORMATION: *Public Comments Invited:* You are asked to comment on any aspect of this information collection, including (a) Whether the proposed collection of information is necessary for FAA's performance; (b) the accuracy of the estimated burden; (c) ways for FAA to enhance the quality, utility and clarity of the information collection; and (d) ways that the burden could be minimized without reducing the quality of the collected information. The agency will summarize and/or include your comments in the request for OMB's clearance of this information collection.

OMB Control Number: 2120–

Title: Survey of Unmanned-Aircraft-Systems Operators.

Form Numbers: Online Collection.

Type of Review: New Information Collection.

Background: The FAA Reauthorizations Act of 2018 explicitly charges the FAA with developing a plan to implement an unmanned aircraft systems traffic management (UTM) services. The development of this congressionally mandated plan requires an estimation of current activity by UAS operators and projecting this behavior into the future as economic, technology, and regulatory condition change. Given the lack of available data on the flight behavior of UAS operators, the FAA proposes a survey of UAS operators who have registered with the FAA under Section 349 or Part 107.

Survey consists of a voluntary questionnaire administered online. Registrants within the FAA's UAS registrations under Part 107 and Section 349 are invited to complete the questionnaire via email. The email contains a personalized link to the questionnaire hosted by Survey Monkey. The questionnaire contains:

• 6 questions on general flight behavior,

• 4 questions about the number and types of UAS operated,

• 5 questions for respondents who identity as commercial operators, and

• 7 questions for respondents who identify as operating for public safety agencies.

Including a social-media preference and self-identifying questions, the questionnaire contains a total 24 question. However, the majority of respondents will only answer the first 12 questions.

The data obtained from the survey will be used for developing national forecasts of UAS activity. Summary data from the proposed survey will be included in the Aviation Forecast published annually by the FAA.

Respondents: Recreational and commercial operators of unmanned aircraft systems (UAS) who have registered with the FAA under Section 349 and Part 107, respectively.

Frequency: Annually.

Estimated Average Burden per Response: 5.3 minutes on average.

Estimated Total Annual Burden: 10,881 hours.

Issued in Washington, DC on 5–8–2020.

Michael Lukacs,

Deputy Division Manager, Office of Aviation Policy and Plans, APO–100, Federal Aviation Administration, Department of Transportation.

[FR Doc. 2020–10139 Filed 5–11–20; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2020–0122]

Parts and Accessories Necessary for Safe Operation; Application for an Exemption From Grote Industries, LLC

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), DOT.

ACTION: Notice of application for exemption; request for comments.

SUMMARY: The Federal Motor Carrier Safety Administration (FMCSA) requests public comment on an application for exemption from Grote Industries, LLC (Grote) to allow motor carriers operating trailers and van body trucks to install brake-activated pulsating warning lamps on the rear of those vehicles in addition to the steady-burning brake lamps required by the Federal Motor Carrier Safety Regulations (FMCSR).

DATES: Comments must be received on or before June 11, 2020.

ADDRESSES: You may submit comments bearing the Federal Docket Management System (FDMS) Docket ID FMCSA–2020–0122 using any of the following methods:

• *Website: http://www.regulations.gov.* Follow the instructions for submitting comments on the Federal electronic docket site.

• *Fax:* 1–202–493–2251.

• *Mail:* Send comments to Docket Operations, M–30; U.S. Department of Transportation, 1200 New Jersey Avenue SE, Room W12–140, West Building Ground Floor, Washington, DC 20590–0001.

• *Hand Delivery of Courier:* Bring comments to Docket Operations in Room W12–140 of the West Building Ground Floor, U.S. Department of Transportation, 1200 New Jersey Avenue SE, Washington, DC, between 9 a.m. and 5 p.m. e.t., Monday–Friday, except Federal holidays. To be sure someone is there to help you, please call (202) 366–9317 or (202) 366–9826 before visiting Docket Operations.

Instructions: All submissions must include the Agency name and docket number for this notice. For detailed instructions on submitting comments and additional information on the exemption process, see the ''Public Participation'' heading below. 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'' heading for further information.

Docket: For access to the docket to read background documents or comments received, go to *http://www.regulations.gov* or to Docket Operations in Room W12–140, U.S. Department of Transportation, West Building Ground Floor, 1200 New Jersey Avenue SE, Washington, DC, between 9 a.m. and 5 p.m., 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 Docket Operations.

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), which can be reviewed at *www.dot.gov/privacy.*

Public participation: The *http://www.regulations.gov* website is generally available 24 hours each day, 365 days each year. You may find electronic submission and retrieval help and guidelines under the ''help'' section of the *http://www.regulations.gov* website as well as the DOT's *http://docketsinfo.dot.gov* website. If you would like notification that we received your comments, please include a self-addressed, stamped envelope or postcard or print the acknowledgment page that appears after submitting comments online.

FOR FURTHER INFORMATION CONTACT: Mr. Luke Loy, Vehicle and Roadside

Operations Division, Office of Carrier, Driver, and Vehicle Safety, MC–PSV, (202) 366–0676, Federal Motor Carrier Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590–0001.

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–2020–0122), indicate the specific section of this document to which the comment applies, and provide a reason for 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 comments online, go to *www.regulations.gov* and put the docket number, ''FMCSA–2020–0122'' in the ''Keyword'' box, and click ''Search.'' When the new screen appears, click on ''Comment Now!'' button and type your comment into the text box in 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 and may grant or not grant this application based on your comments.

II. Legal Basis

FMCSA has authority under 49 U.S.C. 31315(b) to grant exemptions from certain parts of the 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 also provide an opportunity for public comment on the request. The Agency reviews the safety analyses and the public comments 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). The decision of the Agency must be published in the **Federal Register** (49 CFR 381.315(b)). If the Agency denies the request, it must state the reason for doing so. If the decision is to grant the exemption, the notice must specify the person or class of persons receiving the exemption and the regulatory provision or provisions from which an exemption is granted. The notice must specify the effective period of the exemption (up to 5 years) and explain the terms and conditions of the exemption. The exemption may be renewed (49 CFR 381.315(c) and 49 CFR 381.300(b)).

III. Grote's Application for Exemption

The FMCSRs require all exterior lamps (both required lamps and any additional lamps) to be steady-burning, except for turn signal lamps, hazard warning signal lamps, school bus warning lamps, amber warning lamps or flashing warning lamps on tow trucks and commercial motor vehicles transporting oversized loads, and warning lamps on emergency and service vehicles authorized by State or local authorities. Grote has applied for an exemption from 49 CFR 393.25(e) to allow motor carriers operating trailers and van body trucks to install brake-activated pulsating warning lamps on the rear of those vehicles in addition to the steady-burning brake lamps required by the Federal Motor Carrier Safety Regulations (FMCSR). A copy of the application is included in the docket referenced at the beginning of this notice.

V. Request for Comments

In accordance with 49 U.S.C. 31315(b)(6), FMCSA requests public comment from all interested persons on Grote's application for an exemption from 49 CFR 393.25(e). 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. 2020–10116 Filed 5–11–20; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket Number FRA–2009–0104]

Petition for Waiver of Compliance

Under part 211 of title 49 Code of Federal Regulations (CFR), this document provides the public notice that on April 30, 2020, National Railroad Passenger Corporation (Amtrak) petitioned the Federal Railroad Administration (FRA) to renew a waiver of compliance from certain provisions of the Federal railroad safety regulations contained at 49 CFR part 238, Passenger Equipment Safety Standards. FRA assigned the petition Docket Number FRA–2009–0104.

Specifically, Amtrak seeks to renew the relief previously granted regarding flammability and smoke emission requirements for passenger car and locomotive cab materials as outlined in Appendix B of 49 CFR 238.103. Amtrak stated that its current fleet of 205 operating diesel locomotives is comprised of the Genesis P42–8 model manufactured by General Electric (GE). These locomotives were manufactured between 1996 and 2002, when the manufacturing and the material selection process were based on the 49 CFR part 229 regulations. However, due to the inclusion of all locomotives on passenger trains under the 49 CFR part 238 regulations, some materials in the human-occupied areas have since become non-compliant under the latest smoke and flame requirements (49 CFR 238.103).

Amtrak and GE have collectively found alternate manufactures and materials to eliminate the non-compliant materials from the locomotive cab. However, due to the small fleet of passenger locomotives compared with freight locomotives, the cost, and the manufacturing feasibility of these materials, Amtrak has been unable to obtain alternates for the components in question. Therefore, Amtrak seeks a continued waiver for use of these materials in the locomotive cab. Several of these materials need to be replenished in the locomotive cabs; however, due to the non-compliance,

Amtrak has not been able to order these items from vendors. Amtrak listed 13 items in its petition and provided descriptions and analyses about these items as support. Since the original waiver was granted in 2010, Amtrak has not had any safety-related incidents because of the grandfathered materials used in the locomotive cabs.

A copy of the petition, as well as any written communications concerning the petition, is available for review online at *www.regulations.gov* and in person at the U.S. Department of Transportation's (DOT) Docket Operations Facility, 1200 New Jersey Ave. SE, W12–140, Washington, DC 20590. The Docket Operations Facility is open from 9 a.m. to 5 p.m., Monday through Friday, except Federal Holidays.

Interested parties are invited to participate in these proceedings by submitting written views, data, or comments. FRA does not anticipate scheduling a public hearing in connection with these proceedings since the facts do not appear to warrant a hearing. If any interested parties desire an opportunity for oral comment and a public hearing, they should notify FRA, in writing, before the end of the comment period and specify the basis for their request.

All communications concerning these proceedings should identify the appropriate docket number and may be submitted by any of the following methods:

- *Website: http://www.regulations.gov.* Follow the online instructions for submitting comments.
- *Fax:* 202–493–2251.
- *Mail:* Docket Operations Facility, U.S. Department of Transportation, 1200 New Jersey Ave. SE, W12–140, Washington, DC 20590.
- *Hand Delivery:* 1200 New Jersey Ave. SE, Room W12–140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays.

Communications received by June 26, 2020 will be considered by FRA before final action is taken. Comments received after that date will be considered if practicable.

Anyone can search the electronic form of any written communications and comments received into any of our dockets by the name of the individual submitting the comment (or signing the document, if submitted on behalf of an association, business, labor union, etc.). Under 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its processes. 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 *https://www.transportation.gov/privacy.* See also *https://www.regulations.gov/privacyNotice* for the privacy notice of *regulations.gov*.

Issued in Washington, DC.

John Karl Alexy,

Associate Administrator for Railroad Safety, Chief Safety Officer.

[FR Doc. 2020–10111 Filed 5–11–20; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0232]

Agency Information Collection Activity: Verification of Eligibility for Burial in a National Cemetery

AGENCY: National Cemetery Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: National Cemetery Administration (NCA), Department of Veterans Affairs (VA), is announcing an opportunity for public comment on the proposed collection of certain information by the agency. Under the Paperwork Reduction Act (PRA) of 1995, Federal agencies are required to publish notice in the **Federal Register** concerning each proposed collection of information, including each proposed extension of a currently approved collection, and allow 60 days for public comment in response to the notice.

DATES: Written comments and recommendations on the proposed collection of information should be received on or before July 13, 2020.

ADDRESSES: Submit written comments on the collection of information through Federal Docket Management System (FDMS) at *www.Regulations.gov* or to Cynthia Harvey-Pryor, National Cemetery Administration (42E), Department of Veterans Affairs, 810 Vermont Avenue NW, Washington, DC 20420 or email to *cynthia.harvey-pryor@va.gov.* Please refer to ''OMB Control No. 2900–0232'' in any correspondence. During the comment period, comments may be viewed online through FDMS.

FOR FURTHER INFORMATION CONTACT: Cynthia Harvey-Pryor at (202) 461–5870.

SUPPLEMENTARY INFORMATION: Under the PRA of 1995, Federal agencies must obtain approval from the Office of Management and Budget (OMB) for each collection of information they conduct or sponsor. This request for comment is being made pursuant to Section 3506(c)(2)(A) of the PRA.

With respect to the following collection of information, NCA invites comments on: (1) Whether the proposed collection of information is necessary for the proper performance of NCA's functions, including whether the information will have practical utility; (2) the accuracy of NCA'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 respondents, including through the use of automated collection techniques or the use of other forms of information technology.

Authority: Public Law 104–13; 44 U.S.C. 3501–3521.

Title: Verification of Eligibility for Burial in a National Cemetery.

OMB Control Number: 2900–0232.

Type of Review: Revision of a previously approved collection.

Abstract: VA requires applicants for national cemetery burial to provide information to verify eligibility for burial in a national cemetery, to schedule interment and to provide services requested by the decedent's family or personal representative. This information is also used for planning and scheduling cemetery services and to provide for specific requests from family members or the personal representative.

Affected Public: Individuals and households.

Estimated Annual Burden: 33,750.

Estimated Average Burden per Respondent: 15 minutes.

Frequency of Response: One-time.

Estimated Number of Respondents: 135,000.

By direction of the Secretary.

Danny S. Green,

Department Clearance Officer, Office of Quality, Performance, and Risk, Department of Veterans Affairs.

[FR Doc. 2020–10073 Filed 5–11–20; 8:45 am]

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Part II

Environmental Protection Agency

40 CFR Parts 9, 59, 60, et al.

Improvements for Heavy-Duty Engine and Vehicle Test Procedures, and Other Technical Amendments; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9, 59, 60, 85, 86, 88, 89, 90, 91, 92, 94, 1027, 1033, 1036, 1037, 1039, 1042, 1043, 1045, 1048, 1051, 1054, 1060, 1065, 1066, and 1068

[EPA–HQ–OAR–2019–0307; FRL–10006–90–OAR]

RIN 2060–AU62

Improvements for Heavy-Duty Engine and Vehicle Test Procedures, and Other Technical Amendments

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing changes to the test procedures for heavy-duty engines and vehicles to improve accuracy and reduce testing burden. EPA is also proposing other regulatory amendments concerning light-duty vehicles, heavy-duty vehicles, highway motorcycles, locomotives, marine engines, other nonroad engines and vehicles, stationary engines. These would affect the certification procedures for exhaust emission standards, and related requirements. EPA is proposing similar amendments for evaporative emission standards for nonroad equipment and portable fuel containers. These amendments would increase compliance flexibility, harmonize with other requirements, add clarity, correct errors, and streamline the regulations. Given the nature of the proposed changes, they would have neither significant environmental impacts nor significant economic impacts for any sector.

DATES:

Comments: Comments must be received on or before June 26, 2020.

Public Hearing: If anyone contacts us requesting a public hearing on or before May 19, 2020, we will hold a hearing in Ann Arbor, Michigan at 10 a.m. on May 27, 2020.

ADDRESSES:

Comments. Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2019–0307, at *http://www.regulations.gov*. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. 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 comment. 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, 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 *http://www2.epa.gov/dockets/commenting-epa-dockets*.

Public hearing. Individuals are invited to notify EPA of interest in a public hearing; see **FOR FURTHER INFORMATION CONTACT**.

Public Participation: Public hearing. If we hold a public hearing, we will announce detailed information about the hearing on our website. Send requests for a hearing and questions about the status of a hearing to the contact identified in **FOR FURTHER INFORMATION CONTACT**.

Comments. Submit your comments, identified by Docket ID No. EPA–HQ–OAR–2019–0307, at *http://www.regulations.gov*. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. 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 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, 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*.

Docket. EPA has established a docket for this action under Docket ID No. EPA–HQ–OAR–2019–0307. All documents in the docket are listed on the *www.regulations.gov* website. 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 will be publicly available only in hard copy form. Publicly available docket materials are available either electronically in *www.regulations.gov* or in hard copy at Air and Radiation Docket and Information Center, EPA Docket Center, EPA/DC, EPA WJC West Building, 1301 Constitution Ave. NW, Room 3334, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the Air Docket is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: Alan Stout, Office of Transportation and Air Quality, Assessment and Standards Division, Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105; telephone number: (734) 214–4805; email address: *stout.alan@epa.gov*.

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General Information

A. Does this action apply to me?

This action relates to companies that manufacture or sell new gasoline fueled light-duty vehicles, light-duty trucks, medium-duty passenger vehicles, or heavy-duty vehicles up to 14,000 pounds GVWR, as defined under EPA's CAA regulations,[1] and passenger automobiles (passenger cars), non-passenger automobiles (light trucks), and heavy-duty pickup trucks and vans as defined under National Highway Traffic Safety Administration's (NHTSA's) Corporate Average Fuel Economy (CAFE) regulations.[2] Additional amendments apply for different manufacturers of various types of nonroad and stationary engines, vehicles, and equipment.

Regulated categories and entities include the following:

Category	NAICS codes [A]	Examples of potentially regulated entities
Industry	333618, 336111, 336112, 336120, 336211, 336212, 336611, 336911, 336999.	Motor vehicle manufacturers and engine manufacturers.
Industry	811111, 811112, 811198, 423110	Commercial importers of vehicles and vehicle components.
Industry	335312, 811198	Alternative fuel vehicle converters.
Industry	326199, 332431	Portable fuel container manufacturers.

[A] North American Industry Classification System (NAICS).

This list is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

B. What action is the Agency taking?

This action proposes to amend the regulations that implement our air pollutant emission standards for engines, vehicles and mobile equipment. The proposed amendments, which are generally technical amendments that include corrections, clarifications, and flexibilities. In other words, this proposal comprises a significant variety of small changes for multiple types of engines and equipment.

The majority of amendments being proposed would modify existing test procedures for heavy-duty highway engines and vehicles. These test procedure changes would improve accuracy, and in some cases, reduce test burden. They would apply for measurement of criteria pollutants (such as NO_X), as well as greenhouse gas pollutants (primarily CO_2).

Other heavy-duty highway amendments would update EPA regulations to enhance implementation of existing emission standards. For example, some changes would reduce the likelihood that manufacturers would need to duplicate certification efforts to comply with EPA, Canadian, and Californian standards. Some amendments would make it easier for manufacturers to more fully account for the emission benefits of advanced emission control technology, which could provide them the opportunity to generate additional emission credits. These heavy-duty highway amendments are described in Section II.

This notice also proposes other amendments that are generally administrative or technical in nature and include amendments for nonroad engines and vehicles. These amendments are described in Section III. Perhaps the most visible administrative amendment would be the elimination of hundreds of pages of obsolete regulations, which is described in Section III.B.

C. What are the incremental costs and benefits of this action?

This action is limited in scope and is not intended to include amendments that would have significant economic or environmental impacts. EPA has not drafted a Regulatory Impact Analysis.

Heavy-Duty Highway Amendments

A. Test Procedures and Compliance Model Changes

Since the promulgation of the Phase 2 regulations, manufacturers have been revising their internal test procedures to ensure they will be able to comply with the new requirements that begin in model year 2021. In doing so, they have identified several areas in which the test procedure regulations could be improved (in terms of overall accuracy, repeatability and clarity) without changing the effective stringency of the standards. Commenters who believe that EPA has included changes that change the stringency of the standards are encouraged to consider the potential impact in the context of the full range of proposed changes to the test procedures, and to suggest ways in which EPA could avoid the impact of such changes on stringency.

EPA is proposing numerous changes to the test procedure regulations to address manufacturers' concerns and to address other issues we have identified. These proposed changes are described below. The list includes numerous editorial changes that simply correct typographical/formatting errors or revise the text to improve clarity. Although these amendments are being proposed primarily in the context of heavy-duty engines and vehicles, the proposed amendments to part 1065 will also apply to nonroad engines, and the proposed amendments to part 1066 will also apply to light-duty vehicles. However, since these amendments are mostly editorial or adding flexibility, they will not adversely impact these other sectors.

1. 40 CFR Part 1036 Test Procedures

The regulations in 40 CFR part 1036, subpart F, specify how to measure emissions from heavy-duty *engines.* The test procedure amendments being proposed for part 1036 are primarily for the purposes of adding flexibility and reducing variability in test results. Additional information that led to proposal of many of these changes arose from a test program at Southwest Research Institute (SwRI) that was jointly funded by EPA and the Engine Manufacturers Association (EMA). These amendments are summarized below, and readers are referred to the proposed part 1036, subpart F regulatory text for additional information. Amendments for other subparts of part 1036 (*i.e.,* amendments not directly related to test procedures) are discussed in Section I.C.

- 1036.501(g)—Adding a new paragraph (g) to denote duty cycles for testing MY 2016–2020 engines.

[1] ''Light-duty vehicle,'' ''light-duty truck,'' ''medium-duty passenger vehicle,'' and ''heavy-duty vehicle'' are defined in 40 CFR 86.1803–01.

[2] ''Passenger automobile'' and ''non-passenger automobile'' are defined in 49 CFR 523.4 and 523.5, respectively. ''Heavy-duty pickup trucks and vans'' are defined in 49 CFR 523.7.

• 1036.501(h)—Adding a new paragraph (h)(2) to cross-reference citation of transient test cycle specification for testing MY 2021 and later engines. In paragraph (h)(3)(ii), adding clarification that weighting factors for the Ramped Modal Cycle (RMC) are to be applied to CO_2 to calculate the composite emission result. Note that this proposed rule includes amendments to refer to the steady-state duty cycle as the Ramped Modal Cycle rather than the Supplemental Emission Test.

• 1036.503—Migrating 1036.510 to new 1036.503. Updating existing paragraph (c) and adding a new (c)(4) and (d)(4). The new text specifies that the engine manufacturer must provide idle speed and torque to the vehicle manufacturer. Additional direction given on handling data points for a low speed governor where the governor is active.

• 1036.505—Adding a new paragraph (b) to give direction on both engine and powertrain testing. Modifying Table 1 to include vehicle speed and grade parameters to facilitate the hybrid powertrain testing option.

• 1036.510—Adding a new section regarding transient testing of engines and hybrids to facilitate hybrid certification for both GHG and criteria pollutants.

• 1036.525(d)(4)(ii)—Editorial revisions to equation and example calculations.

• 1036.527—New section added to provide a means to determine hybrid powertrain systems rated power. This is needed to facilitate the addition of the hybrid powertrain testing option.

• 1036.530(b)(1)(i) and (2)—Updating to require test fuel mass-specific energy content to be analyzed by three different labs and the arithmetic mean to be used in the calculation. Updating carbon mass fraction determination to allow analysis by a single lab only to facilitate on-line analysis from pipeline supplied natural gas. Updated to add ASTM method for determination of test fuel mass-specific energy content for natural gas.

• 1036.530 Table 1—Updated footnote format in table.

• 1036.535—Generally updating to improve the engine fuel mapping test procedures based on the jointly funded EPA–EMA test program. The overall result of these updates is to reduce the variability of the emission test results to improve lab-to-lab variability.

• 1036.540—Generally updating to improve the cycle-average fuel mapping test procedure as a result of the jointly funded EPA–EMA test program at SwRI. The overall result of these updates is to reduce the variability of the emission test results to improve lab-to-lab variability.

• 1036.543—Adding new section to address carbon balance error verification. This is a result of the jointly funded EPA–EMA test program. The overall result of these updates is to reduce the variability of the emission test results to improve lab-to-lab variability.

2. 40 CFR Part 1037 Test Procedures

The regulations in 40 CFR part 1037, subpart F, specify how to measure emissions from heavy-duty *vehicles.* They also specify how to measure certain GEM inputs, such as aerodynamic drag, rolling resistance, and axle efficiency. The test procedure amendments being proposed for part 1037, which are summarized below, are primarily for the purpose of reducing variability in test results and adding optional test procedures. Given the technical nature of these proposed amendments, readers are referred to the regulatory text for additional details. Proposed amendments for other subparts of part 1037 (*i.e.,* amendments not directly related to test procedures) are discussed in Section I.C.

• 1037.105 Table 1—Updated footnote format in table.

• 1037.106 Table 1—Updated footnote format in table.

• 1037.510(a)(2) and (e)—Edit in (a)(2) introductory paragraph. Updating (a)(2)(ii) and (iii) as result of the jointly funded EPA-Engine Manufacturers Association (EMA) test program at SwRI. The overall result of these updates is to reduce the variability of the emission test results to improve lab-to-lab variability. Update (e) making use of cruise control optional as variability can be high if cruise control is used.

• 1037.510 Table 1—Updated footnote format in table.

• 1037.515 Table 3—Updated footnote format in table.

• 1037.520 Table 1 and (f)—Correcting typo in CdA value for low-roof cabs for Bin III. Updating cross-reference in (f).

• 1037.520(g)—Adding some additional vehicle characteristics that need to be reported. Also providing clarification on the application of the 6x4D drive axle configuration. This includes a better description of the application as well as qualifiers that allow for use of this configuration.

• 1037.520(i)—Adding torque converter characterization.

• 1037.520 Table 1—Updating Table to include additional technologies and GEM input values for automatic engine shutdown systems.

• 1037.520(j)(5)—Correcting error that transposed school and coach bus GEM inputs.

• 1037.520 Table 6—Updated footnote format in table.

• 1037.528(h)(6)(ii)—Adding direction to use good engineering judgment when measuring rolling resistance for equation 11.

• 1037.528—Updating equation 14. The ''+'' is replaced with a '' − '', correcting a typo.

• 1037.534—Updating equation 6, and corresponding example problem. The update applies italics to ''i''.

• 1037.540—Updating equations 1, 2, and 3. The update applies italics to ''i''.

• 1037.540(e) and (f)—Adding section reference for location of standard payload.

• 1037.540 Table 1—Updated footnote format in table.

• 1037.550—Global updates as a result of the joint EPA–EMA fuel mapping test program at SwRI and general improvements based on experience gained from testing powertrain systems. The overall result of these updates is to reduce the variability of the emission test results to improve lab-to-lab variability.

• 1037.551—Updating reference.

• 1037.555—Updating equations 1 and 3, edits. The updates apply italics to ''i''.

• 1037.560—Making it optional to drain gear oil after break in. Providing the option of an alternative temperature range to provide harmonization with EC test procedure. Also, edits pertaining to improve the readability of the Ploss (*i.e.,* power loss) variable description.

• 1037.565—Providing an option to map additional test points. Also, edits pertaining to improve the readability of the Ploss variable description.

• 1037.570—Adding new section to determine torque converter capacity factor. This will allow a manufacturer to determine their own torque converter capacity factor instead of using the default value provided in GEM. The option to use the default value still remains.

3. 40 CFR Part 1065 Test Procedures

The regulations in 40 CFR part 1065 specify general procedures for measuring emissions from engines—heavy-duty highway engines, as well as nonroad engines. The amendments being proposed for part 1065, which are summarized below, are primarily for the purpose of reducing variability in test results.

The regulations in part 1065 rely heavily on acronyms and abbreviations (see 40 CFR 1065.1005 for a complete list). Acronyms used here are summarized in the following table:

ASTM	American Society for Testing and Materials
CVS	Constant-Volume Sampler
DEF	Diesel Exhaust Fluid
ECM	Electronic Control Module
NIST	National Institute for Standards and Technology
NMC FID	Nonmethane Cutter with a Flame Ionization Detector
NMHC ...	Nonmethane Hydrocarbon
NMNEHC	Nonmethane Nonethane Hydrocarbon
RMC	Ramped Modal Cycle
THC FID	Flame Ionization Detector for Total Hydrocarbons

In addition to the amendments listed below that are being proposed for part 1065, we request comment on the use of ASTM test method D2784 to measure the sulfur content in liquefied petroleum gas test fuels. This method, which is specified as the applicable test method in § 1065.720, has been withdrawn by ASTM without replacement. We request comment on whether we should continue to specify this method or specify an active method. For example, should we specify ASTM D6667 instead and incorporate it by reference into the regulations?

- 1065.1(g)—Updated test procedure URL.
- 1065.130(e)—Revised language to denote that carbon balance should be performed to verify exhaust system integrity in place of chemical balance.
- 1065.140(c)(6)(i)—Corrected typo. Replaced ''dew point'' with ''dewpoint''.
- 1065.140(e)(2)—Revised language to add clarification on how to determine minimum dilution ratio for discrete mode testing.
- 1065.145(e)(3)(i)—Removed requirement to heat sample pump if it is located upstream of a NO_X converter or chiller. Replaced with requirement to design the sample system to prevent aqueous condensation. Given that the concern is loss of NO_2 in the sampling system, the pump itself doesn't necessarily need to be heated as there are a number of ways to prevent condensation.
- 1065.170—Revised to allow you to stop sampling during hybrid tests when the engine is off and allow exclusion of the sampling off portions of the test from the proportional sampling verification. Also added provision for hybrid testing to allow supplemental dilution air to be added to the bag in the event that sampled volumes are too low for emission analysis.
- 1065.205 Table 1—Revised with edits and the addition of a recommended performance specification for fuel mass scales to reduced fuel flow measurement error.
- 1065.220(a) introductory and (a)(3)—Updated the application of fuel flow meter to more correctly reflect how and what they are used for in 1065.
- 1065.225(a) introductory and (a)(3)—Updated the application of intake flow meter to more correctly reflect how and what they are used for in 1065.
- 1065.247(c)(2)—Edit to apply requirements to DEF dosing unit rather than to the engine.
- 1065.260(e)—Add the word ''some'' as a qualifier for gaseous fueled engines with respect to using the additive method for NMHC determination.
- 1065.266—Updated URL.
- 1065.275—Deleted URL and replaced with reference to URL in 1065.266.
- 1065.280(a)—Updated to reflect that there is no method in 1065.650 for determining oxygen balance and that you should develop a method using good engineering judgment.
- 1065.303 Table 1—Updated for formatting. Updated to add Fuel mass scale and DEF mass scale to the linearity verifications in 1065.307. Updated verification in 1065.341 to replace ''batch sampler'' with ''PFD'' as PFD is the preferred language. Updated one, and added two, footnotes excluding linearity verification for DEF flow if the ECM is used and for fuel and intake air flow if propane checks or carbon balance is performed. This is not a new exemption, it just relocates it to the footnote area.
- 1065.307(d)(4)—Revised to include DEF mass flow rate. The paragraph is also enhanced to include additional requirement to correct or account for buoyancy effects and flow disturbances to improve the flow measurement.
- 1065.307(d)(6)(i)—Revised to state that the span gas can only contain one single constituent in balance air (or N_2 if using a gas analyzer) as the reference signal for linearity determination.
- 1065.307(d)(7)—Revised to state that the span gas can only contain one single constituent in balance air (or N_2 if using a gas analyzer) as the reference signal for linearity determination.
- 1065.307(d)(9)—Expanded paragraph to include fuel and DEF mass scales and provided additional requirements for performing the linearity verification on these scales.
- 1065.370(e)(3)(i) and (ii)—Edits to make intent clear.
- 1065.307(e)(3)(iii)—Defined m_{max} for a fuel mass scale.
- 1065.307(e)(5)—Provided additional information surrounding requirements for using a propane check or carbon balance verification in place of a flow meter linearity verification.
- 1065.307(e)(7)(i)(F) and (G)—Added transmission oil and axle gear oil to temperature measurements that require linearity verification.
- 1065.307 Table 1—Added DEF flow rate.
- 1065.307 Table 2—Added a new Table 2 to provided additional guidance on when optional verifications to the flow meter linearity verifications can be used.
- 1065.309(d)(2)—Updated to allow the use of water vapor injection for humidification of gases.
- 1065.315(a)(3)—Editorial revisions.
- 1065.320(b) and (c)—Deleted the existing paragraph (b) and moved the existing (c) to (b) as this is now adequately covered in 1065.307.
- 1065.341 introductory text—Revised to clarify which subparagraphs apply to CVS and which apply to PFD.
- 1065.341(g)—Revised to replace ''batch sampler'' with ''PFD'' throughout. Also, edited to provide further clarification on the procedure.
- 1065.341(h)—New paragraph added to reference Table 2 of 1065.307 regarding when alternate verifications can be used.
- 1065.342(d)(2)—Updated to allow the use of water vapor injection for humidification of gases.
- 1065.350(d)(2)—Updated to allow the use of water vapor injection for humidification of gases.
- 1065.355(d)(2)—Updated to allow the use of water vapor injection for humidification of gases.
- 1065.360(a)(4)—Added new requirement to determine methane and ethane THC FID response factors as a function of exhaust molar water content when measuring emissions from a gaseous fueled engine. This is to account for the effect water has on non-methane cutters.
- 1065.360(d)(12)—Added process to determine methane and ethane THC FID response factors as a function of exhaust molar water content when measuring emissions from a gaseous fueled engine. This is to account for the effect water has on non-methane cutters.
- 1065.365(d)—Added new requirement to determine NMC FID methane penetration fraction and ethane response factor as a function of exhaust molar water content when measuring emissions from a gaseous fueled engine. This is to account for the effect water has on non-methane cutters.
- 1065.365(d)(10) and (11)—Added process to determine NMC FID methane penetration fraction and ethane response factors as a function of exhaust molar water content when measuring emissions from a gaseous fueled engine. This is to account for the effect water has on non-methane cutters.

• 1065.370(e)(5)—Updated to allow the use of water vapor injection for humidification of gases.

• 1065.375(d)(2)—Updated to allow the use of water vapor injection for humidification of gases.

• 1065.410(d)—Updated to state that you may repair a test engine if the parts are unrelated to emissions without prior approval. If the part may affect emissions, prior approval is required.

• 1065.510(a), (b)(5)(i), and (f)(4)(i)—Removed requirement for engine stabilization during mapping and relocated it to 1065.510(b)(5)(i), which lays out the mapping procedure. Added a recommended stabilization time at each setpoint. Also added allowance to specify CITT as a function of idle speed in cases where an engine has an adjustable warm idle or enhanced idle.

• 1065.512(b)(1) and (2)—Added additional procedures on how to operate the engine and validate the duty-cycle when an engine utilized enhanced-idle speed. This also addresses denormalization of the reference torque when enhanced-idle speed is active.

• 1065.530(a)(2)(iii)—Added new instruction on how to determine that the engine temperature has stabilized for air cooled engines. Part 1065 is deficient on how to determine this.

• 1065.530(g)(5)—New paragraph to cover carbon balance error verification if it is performed as part of the test sequence.

• 1065.543—New section on carbon balance error verification procedure. This was added to further reduce measurement variability for the fuel mapping test procedure in part 1036.

• 1065.602(b), (c), (d), (e), (g), (h), (j), (k)—Editorial revisions. The updates apply italics to ''i''.

• 1065.602 Table 2—Corrected an Nref-1 typo for value ''22''. It was mistakenly listed as ''20''.

• 1065.602(f)—Updated footnote format in table.

• 1065.610(a)(1)(iv)—Editorial updates applying italics to ''i''.

• 1065.610(a)(2)—Clarification to denote that the alternate maximum test speed determined is for all duty-cycles.

• 1065.610(d)(3)—Added provision to use good engineering judgment to come up with an alternate procedure for adjusting CITT as a function of speed.

• 1065.640(a) and (d)(1)—Deleting a comma in (a)(1). Providing a conversion to kg/mol for Mmix in (d)(1). Also correcting an error in the example problem to equation 1065.640–10 where Mmix was used with the wrong units.

• 1065.642(b)—Section reference correction.

• 1065.642(c)(1)—Defining $C_{f,}$

• 1065.643—New section on carbon balance error verification calculations to support the new section 1065.543.

• 1065.650(b)(3)—Added DEF to what is needed for chemical balance.

• 1065.650(c)(1)—Relocated transformation time requirement here from 1065.650(c)(2)(i).

• 1065.650(c)(3)—Equation edit. The update applies italics to ''i''.

• 1065.650(d)(7)—Editorial updates applying italics to ''i''.

• 1065.650(f)(2)—Added DEF to what is needed for chemical balance.

• 1065.655 title—Added ''DEF''.

• 1065.655(c)(3)—Updated $x_{ccombdry}$ variable description to include injected fluid.

• 1065.655(e)(1)(i)—Added additional clarity regarding determination of carbon and hydrogen mass fraction of fuel, specifically to S and N content.

• 1065.655(e)(4)—Equation and variable edits for format. The updates apply italics to ''i''.

• 1065.655 Table 1—Updated reference.

• 1065.655(f)(3)—Restricted the use of equation 1065.655–25 if the standard setting part requires carbon balance verification. Also, the section contains edits for format.

• 1065.655(g)(1)—Updated reference.

• 1065.659(c)(2) and (3)—Added DEF to chemical balance.

• 1065.660(b)(4)—Variable edit. Corrected chemical formula typo for acetaldehyde.

• 1065.660(c)(2)—Included NMC FID as allowable option in NMNEHC calculation.

• 1065.665(a)—Deleted the variable and description for $C_{\#}$ as it is not used in any calculation in this section.

• 1065.667(d)—Added DEF to chemical balance description.

• 1065.695(c)(8)(v)—Added carbon balance verification.

• 1065.701(b)—Updated title for California gasoline type.

• 1065.701 Table 1—Updated footnote format in table.

• 1065.703 Table 1—Updated to correct units for kinematic viscosity and updated footnote format in table.

• 1065.705 Table 1—Updated to correct units for kinematic viscosity and updated footnote format in table.

• 1065.710 Table 1—Edits for format consistency and updated footnote format in table.

• 1065.710 Table 2—Edits for format consistency. Added allowance to use ASTM D5769 for total aromatic content determination and ASTM D6550 for olefin determination. These were added because the dye used in the current method, ASTM D1319 is becoming scarce and thus an alternate method is needed. Updated footnote format in table.

• 1065.715 Table 1—Updated footnote format in table.

• 1065.720 Table 1—Updated footnote format in table.

• 1065.750 Table 1—Updated footnote format in table.

• 1065.905 Table 1—Updated footnote format in table.

• 1065.915 Table 1—Updated footnote format in table.

• 1065.1001—Updated definition of test interval to note that the mass of emissions is determined over it.

• 1065.1005(a)—Updated footnote format in table.

• 1065.1005(a), (c) and (d)—Updated to follow NIST SP–811 format.

• 1065.1005(a) and (e)—symbols and subscripts updated to reflect new one added during the above revisions to part 1065.

• 1065.1005(f)(2)—molar mass of ethane added. Updated footnote format in table.

4. 40 CFR Part 1066 Test Procedures

The regulations in 40 CFR part 1066, specify general procedures for measuring emissions from vehicles. The amendments being proposed for part 1066, which are summarized below, are primarily editorial.

• 1066.1(g)—Updated to current URL.

• 1066.135(a)(1)—Widened the range for verifications of a gas divider derived analyzer calibration curve to 10 to 60%. This is to ease lab burden with respect to the number of gas cylinders they must have on hand. Also, made this midspan check optional as it is no longer needed because part 1066 requires yearly linearity verification of the gas divider.

• 1066.210(d)(3)—Changed acceleration of Earth's gravity from calculation under 40 CFR 1065.630 to a default value of 9.80665 m/s². This was changed because the track coastdown doesn't take place in the same location that the dynamometer resides. Therefore, best practice is to use a default value for gravity.

• 1066.255(c)—Added clarification that the torque transducer zero and span are mathematically done prior to the start of the procedure.

• 1066.270(c)(4)—Corrected units for force in mean force variable description. Corrected example problem solution.

• 1066.275—Extended the frequency to an optional 7 days prior to testing if historic data from the test site supports a frequency of more than 1 day.

• 1066.405—Updated title to include ''maintenance''.

• 1066.405(a)–(c)—Moved introductory paragraph to (a). Created

new paragraphs (b) and (c) to address test vehicle inspection, maintenance and repair, consistent with 1065.410.

• 1066.420 Table 1—Updated footnote format in table.

• 1066.605—Edit in paragraph (c)(4), NMHC typo, corrected to NMHCE. Edits to equation 1066.605–10, italics added for format consistency.

• 1066.610—Edit to equation 1066.610–4. Italics added for format consistency.

• 1066.710(c)(1)(A)—Updated for clarity.

• 1066.710(c)(2)—Updated to more clearly reflect how automatic HVAC control operates in vehicles and how it should be operated for the test.

• 1066.801 Figure 1—Updated to reflect that the initial vehicle soak, as outlined in the regulations, is a 6-hour minimum and not a range of 6 to 36 hours.

• 1066.930—Added a period to the end of the sentence.

• 1066.1005(c) and (d)—Updated to follow NIST SP–811 format.

• 1066.1005(f)—Updated footnote format in table.

5. Greenhouse Gas Emissions Model (GEM)

GEM is a computer application that estimates the greenhouse gas (GHG) emissions and fuel efficiency performance of specific aspects of heavy-duty (HD) vehicles. Under the existing Phase 2 regulations, GEM 3.0 is used to determine compliance with the Phase 2 standards from several vehicle-specific inputs, such as engine fuel maps, aerodynamic drag coefficients, and vehicle weight rating.[3] GEM simulates engine operation over two cruise cycles, one transient cycle, and for vocational vehicles, idle operation. These results are weighted by GEM to provide a composite GEM score that is compared to the standard.

EPA is to incorporate by reference into the regulations a revised version of GEM (Version 3.5) for manufacturers to demonstrate compliance with the Phase 2 standards.[4] The following changes have been incorporated in the proposed new version, to allow additional compliance flexibilities and improve the vehicle simulation:

• Correcting how idle emission rates are used in the model.

• Increasing the allowable weight reduction range to 25,000 pounds.

• For powertrain input, adding an input for powertrain rated power to scale default engine power.

• Recalibrated driver over speed allowance on cruise cycles from 3 mph to 2.5 mph.

• Revised engine cycle generation outputs with corrected engine cycle generation torque output from model based on simulated inertia and rate limited speed target.

• Added scaling of powertrain simulation default engine and transmission maps based on new rated power input.

• Changed interpolation of fuel map used in post processing to be consistent with one used in simulation.

• Powertrain accessory load correction.

• Add torque converter k-factor input option.

• Cycle average cycles: add flag for points that are to be considered ''idle.''

• Improved handling of large input tables.

Of these, the changes for idling emissions are the most significant. GEM 3.0 included an error where parked idle fuel map was used for ARB transient idle correction, which has been corrected for GEM 3.5 to use the drive idle portion of the map. (Note also that parked fuel map is now only required for vocational vehicles.) GEM 3.5 reads idle speed from the vehicle file and allows manufacturers to use default values that EPA used to develop the standards. Other idle changes include additional adjustments to cycle average fuel for differences between mapped idle and simulated idle using non-moving average speed and load of the ARB transient cycle average map, regression lookup of cycle average map uses only portions with vehicle moving, and post-process adjustment to fuel consumption based on simulated idle speed/load.

Preliminary evaluations of GEM 3.5 indicate that there is little difference between GEM 3.0 and GEM 3.5 for cruise cycle operation. However, it is possible some minor differences may be observed for transient and idle operation of some vocational vehicles. We request comment on whether these differences would impact impact the effective stringency of the standards and whether either GEM or the regulations need to be revised to address them.

B. Heavy-Duty Engine GHG Emission Standards and Flexibility

1. Vocational Engines and Emission Credits

We are proposing to revise how Phase 1 engine credits from vocational engines are treated in the Phase 2 program. As described below, we are proposing to allow more flexibility provided the credits are adjusted to accurately reflect the correct baseline.

In developing the baseline emission rates for vocational engines in the final Phase 2 rulemaking, we considered MY 2016 FTP certification data for diesel engines, which showed an unexpected step-change improvement in engine fuel consumption and CO_2 emissions compared to data considered in the proposed rule. The proposed baseline emission rates came from the Phase 1 standards, which in turn were derived from our estimates of emission rates for 2010 engines. The underlying reasons for this shift in the final rule were mostly related to manufacturers optimizing their SCR thermal management strategy over the FTP in ways that we (mistakenly) thought they already had in MY 2010 (*i.e.,* the Phase 1 baseline).

As background, the FTP includes a cold-start, a hot-start and significant time spent at engine idle. During these portions of the FTP, the NO_X SCR system can cool down and lose NO_X reducing efficiency. To maintain SCR temperature, manufacturers initially used a simplistic strategy of burning extra fuel to heat the exhaust system. However, during the development of Phase 1, EPA believed manufacturers were using more sophisticated and efficient strategies to maintain SCR temperature. EPA's misunderstanding of the baseline technology for Phase 1 provided engine manufacturers the opportunity to generate windfall credits against the FTP standards.

For the Phase 2 FRM, EPA revised the baseline emission rate for vocational engines to reflect the actual certified emission levels. The Phase 2 vocational engine final CO_2 baseline emissions are shown in the table below. More detailed analyses on these Phase 2 baseline values of tractor and vocational vehicles can be found in Chapter 2.7.4 of the Phase 2 Final RIA.[5]

[3] Greenhouse gas Emissions Model (GEM) Phase 2, Version 3.0, July 2016. A working version of this software is also available for download at *http://www.epa.gov/otaq/climate/gem.htm*. This version has been incorporated by reference at 40 CFR 1037.810.

[4] Greenhouse gas Emissions Model (GEM) Phase 2, Version 3.5, November 2019. A working version of this software is also available for download at *http://www.epa.gov/otaq/climate/gem.htm*.

[5] Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2. Regulatory Impact Analysis, August 2016, EPA–420–R–16–900. See p. 2–76.

PHASE 2 VOCATIONAL ENGINE CO_2 AND FUEL CONSUMPTION BASELINE EMISSIONS

Units	HHD	MHD	LHD
g/bhp-hr	525	558	576
gal/100 bhp-hr	5.1572	5.4813	5.6582

EPA did not allow the carryover of Phase 1 vocational engine credits into the Phase 2 program, consistent with these adjustments to the baselines. Since this issue does not apply for RMC emissions, the restriction was applied only for engines certified exclusively to the FTP standards (rather than both FTP and RMC standards). We believed that allowing engine credits generated against the Phase 1 diesel FTP standards to be carried over into the Phase 2 program would have inappropriately diluted the Phase 2 engine program. However, this was in the context of unadjusted credits. After further consideration, we now believe that it would not dilute the program if the credits were appropriately adjusted to more accurately reflect improvement over the true baseline levels.

Allowing the portion of the credits that represent actual emission improvements to be carried forward would be consistent with our rationale from Phase 2. Thus, we are proposing in § 1036.701(j) that for Phase 1 vocational engines with emissions below the Phase 2 baseline engine values, manufacturers may recalculate and generate credits relative to the baseline levels. The recalculated vocational engine credits would be allowed into the Phase 2 engine program to the same extent as tractor engine credits.

As noted in the Phase 2 FRM, allowing additional flexibility for compliance with engine standards does not cause any increase in emissions because the manufacturers must still comply with the vehicle standards. (See 81 FR 73499). However, this flexibility could allow some manufacturers to find a less expensive compliance path. We request comment on these proposed changes and any potential impact.

2. Confirmatory Testing of Engines and Measurement Variability

During the Phase 2 rulemaking, manufacturers raised concern about measurement variability impacting the stringency of the engine GHG standards and fuel map requirements. As noted in the Phase 2 FRM, the final standards were developed to account for this. (81 FR 73571, October 25, 2016).

Manufacturers raised particular concern about variability of fuel map measurements because neither they nor EPA had sufficient experience measuring fuel maps (in a regulatory context) to fully understand potential impacts. We estimated the fuel map uncertainty to be equivalent to the uncertainty associated with measuring CO_2 emission and fuel consumption over the FTP and RMC cycles, which we estimated to be about one percent. However, the Phase 2 FRM further noted that we would incorporate test procedure improvements that would futher reduce test result uncertainty. We also noted that: ''If we determine in the future . . . that the +1.0 percent we factored into our stringency analysis was inappropriately low or high, we will promulgate technical amendments to the regulations to address any inappropriate impact this +1.0 percent had on the stringency of the engine and vehicle standards.'' (81 FR 73571, October 25, 2016)

In conjunction with this commitment, EPA agreed to work with engine manufacturers to better understand the variability of measuring fuel maps. Through that work, we identified several sources of variability that could be reduced by making small changes to the test procedures. EPA is proposing these changes, which are listed in Sections I.A.1 through I.A.3 of this NPRM.

SwRI performed emission measurements in multiple test cells and identified distributions of error for other test inputs such measured fuel properties and calibration gas concentrations. SwRI then used a Monte Carlo simulation to estimate a distribution of errors in measured fuel maps.[6] After reviewing the results, EPA has three significant observations:

1. The variability of measuring CO_2 and fuel consumption during fuel mapping is greater than the one percent assumed in the Phase 2 FRM.

2. The variability of measuring CO_2 and fuel consumption during the fuel mapping procedure is roughly the same as that of the FTP and RMC cycles.

3. Measuring CO_2 and fuel consumption at idle is particularly challenging.

Given these results, we understand why manufacturers would be concerned about the possibility of EPA changing an official fuel map results as a consequence of EPA confirmatory testing where the measured maps were within the expected range of variability. On the other hand, the similarity between the variability of measuring fuel maps and the variability of measuring CO_2 and fuel consumption over the FTP and RMC cycles (measurements for which EPA has already determined in both Phase 1 and Phase 2 that no such allowances are needed) suggests that manufacturers should ultimately be able to comply without any special provisions.

We are also considering this issue in the context of our longstanding policy that emission measurements made at our National Vehicle and Fuel Emissions Laboratory are official emission results. (See for example, § 1036.235.) We are hesitant to change any long-standing policy in a technical amendment rulemaking. Nevertheless, while we believe this issue ultimately will need to be addressed in a broader context, we are proposing a transitional approach to address the issue of engine mapping variability, as discussed below.

We are proposing an interim provision in 40 CFR 1036.150, under which EPA will not replace a manufacturer's fuel maps during confirmatory testing if the EPA-measured fuel maps were within 2.0 percent of the manufacturer's maps. We are proposing this as an interim provision but are not including an end date at this time. We would intend to reevaluate this provision as we learn more about the impact of measurement variability during fuel mapping, including the full impact of the proposed test procedure improvements that are intended to reduce measurement variability.

Since, this 2.0 percent reflects real testing variability, EPA anticipates that manufacturers could not know how the variability would affect an individual test result, which would preclude them from relying upon this margin for compliance in current engine designs or in any potential engine redesign. Additionally, EPA emphasizes that we are proposing to adopt this as an interim provision, and thus manufacturers should not otherwise rely on this provision as a compliance strategy for engine design, as EPA intends to revisit it based on further data and developments.

We are also proposing an algorithm for comparing fuel maps to one another. Because fuel maps are multi-point surfaces instead of single values, it would be a common occurrence that some of EPA's points would be higher than the manufacturer's while others would be lower.

We propose that EPA's measured fuel maps would be used with GEM according to § 1036.540 to generate emission duty cycles which simulate several different vehicle configurations, generating emission results for each of the vehicles for each of the duty cycles.

[6] ''Measurement Variability Assessment of the GHG Phase 2 Fuel Mapping Procedure'', Southwest Research Institute, Final Report, December 2019.

Each individual duty cycle result could be weighted using the appropriate vehicle category weighting factors in Table 1 of 40 CFR 1037.510 to determine a composite CO_2 emission value for that vehicle configuration. If the process is repeated for the manufacturer's fuel maps, the average percent difference between fuel maps could be calculated as:

$$difference = \left(\frac{\sum_{i=1}^{N} \frac{e_{\mathrm{CO2compEPA}i} - e_{\mathrm{CO2compManu}i}}{e_{\mathrm{CO2compManu}i}}}{N} \right) \cdot 100\ \%$$

Where:

i = an indexing variable that represents one individual weighted duty cycle result for a vehicle configuration.

N = total number of vehicle configurations.

eCO2compEPA = total composite mass of CO_2 emissions in g/ton-mile for the EPA confirmatory test, rounded to the nearest whole number for vocational vehicles and to the first decimal place for tractors.

eCO2compManu = total composite mass of CO_2 emissions in g/ton-mile for the manufacturer test, rounded to the nearest whole number for vocational vehicles and to the first decimal place for tractors.

We request comment on the interim approach, and whether it appropriately balances the impacts of testing variability for fuel maps.

3. Other Minor Heavy-Duty Engine Amendments

EPA is proposing three additional amendments to part 1036:

• *Correcting the assigned N_2O deterioration factor in § 1036.150(g).* In the Phase 2 NPRM, EPA proposed to lower the N_2O standard from 0.10 g/hp-hr to 0.05 g/hp-hr for model year 2021 and later diesel engines. In that context, we also proposed to lower the assigned deterioration factor (DF) from 0.020 g/hp-hr to 0.010 g/hp-hr for model year 2021 and later diesel engines. EPA explained in the preamble that we were not finalizing the change to the standard (81 FR 73530), but inadvertently finalized the proposed DF change in the regulations. Today, EPA is proposing to correct the DF back to 0.020 g/hp-hr for all diesel engines, consistent with the continuation of the 0.10 g/hp-hr N_2O standard.

• *Clarifying a reference to non-gasoline engine families in § 1036.705(b)(5).* The second sentence of § 1036.705(b)(5) is intended to refer to non-gasoline engine families. However, the existing text is not clear. As written, it can be read to mean that gasoline engine families may not generate emission credits. EPA is proposing to add ''non-gasoline'' to make the intended meaning clearer.

• *Engine families.* Proposing to allow engine families to be divided into subfamilies with respect to CO_2. This allowance would simplify the certification process without changing the overall requirements.

• *Adding a summary of previously applicable emission standards as Appendix I of part 1036.* The proposed new Appendix is needed for reference to previously applicable emission standards and will cover regulatory text being deleted from 40 CFR part 86.

C. Heavy-Duty Vehicle GHG Emission Standards and Flexibility

1. Considerations of Aerodynamic Compliance Data

The aerodynamic drag of a vehicle is determined by the vehicle's coefficient of drag (C_d), frontal area, air density and speed. The regulations in § 1037.525 allow manufacturers to use a range of techniques, including wind tunnel testing, computational fluid dynamics, and constant speed tests. This broad approach is appropriate given that no single test procedure is superior in all aspects to other approaches. However, we also recognized the need for consistency and a level playing field in evaluating aerodynamic performance. To address the consistency and level playing field concerns, EPA adopted an approach that identified coastdown testing as the reference aerodynamic test method, and specified a procedure to align results from other aerodynamic test procedures with the reference method by applying a correction factor ($F_{alt\text{-}aero}$) to results from alternative methods (§ 1037.525(b)).

With this approach, it is important that $F_{alt\text{-}aero}$ be accurate. Thus, the regulations (§ 1037.525(b)) require that manufacturers use good engineering judgement[7] when developing $F_{alt\text{-}aero}$, which would include considering all applicable coastdown data that are available. The applicable test data would be those coastdown results that were collected according to the specified test procedures, whether collected by the manufacturer during certification and SEAs, or by EPA during confirmatory testing.

Consider the hypothetical example shown in the figure below, where a manufacturer has coastdown results for eight vehicles. The plot shows the coastdown results corrected to represent wind averaged C_dA, plotted against the corresponding wind average wind tunnel results. Applying good engineering judgement to such a dataset would lead a manufacturer to separate the vehicles into two groups, with each having its own $F_{alt\text{-}aero}$ value. The manufacturer would then need to work with EPA to determine how to appropriately apply these $F_{alt\text{-}aero}$ values to other vehicle configurations.

As described in 40 CFR 1037.235, EPA may perform confirmatory testing on the manufacturer's vehicles, including a vehicle tested to establish the $F_{alt\text{-}aero}$ value. The regulations also include an interim provision in § 1037.150(s) that states:

> If we conduct coastdown testing to verify your $F_{alt\text{-}aero}$ value for Phase 2 tractors, we will make our determination using a statistical analysis consistent with the principles of SEA testing in § 1037.305. We will calculate confidence intervals using the same equations and will not replace your test results with ours if your result falls within our confidence interval or is greater than our test result.

We are proposing to revise the interim allowance in § 1037.150(s) to require EPA to perform a minimum of 100 valid runs before replacing a manufacturer's value.

Test conditions for coastdown testing are another important consideration. For our testing, EPA intends to minimize the differences between our test conditions and those of the manufacturer by testing at similar times of the year. However, because of the limited number of coastdown test facilities and the challenges of

[7] Good engineering judgment means judgments made consistent with generally accepted scientific and engineering principles and all available relevant information. See 40 CFR 1068.5 for additional discussion about applying good engineering judgment.

scheduling time for testing, we cannot commit to testing during the same season as the manufacturer. In addition, even if we could test during the same season, we cannot prevent differences in test conditions.

Some manufacturers have expressed concern that this approach leaves too much risk for them because changing an $F_{alt\text{-}aero}$ value would impact a large portion of their production and could undermine their compliance plans. These manufacturers suggest that EPA should revise the regulations to provide for larger differences before EPA is allowed to replace their value. Although we understand this concern, we do not believe the manufacturers' suggestion would be the appropriate long-term solution. When multiple measurements provide different values, good engineering judgment would generally call for more data rather than selecting a single value. Keeping with this principle, EPA is requesting comment on a potential allowance for manufacturers to conduct additional coastdown testing in response to a change by EPA to their $F_{alt\text{-}aero}$ value through a 40 CFR 1068.5 good engineering judgment request. EPA would attempt to be present to witness the testing, and potentially take our own measurements. EPA would follow the procedures under 40 CFR 1068.5 in responding to the manufacturer to determine an appropriate $F_{alt\text{-}aero}$ value, consistent with good engineering judgment.

Section 208 of the Act provides EPA broad oversight authority for manufacturer testing. Consistent with that authority, we are proposing to add a provision to our regulations at 40 CFR 1037.525(b)(8) to encourage manufacturers to proactively coordinate with EPA to have compliance staff present when a manufacturer conducts its coastdown testing to establish $F_{alt\text{-}aero}$ values. Being present for the testing would give EPA greater confidence that the test was conducted properly, and thus, would make it less likely that EPA would need to conduct aerodynamic confirmatory testing on the vehicle. Additionally, under our current regulations, see 40 CFR 1037.301 and 1037.305, EPA may require, and generally intends to require for the 2021 model year, that manufacturers perform SEA testing of at least one of their reference configurations.

We are also proposing to revise the minimum number of runs required for a manufacturer to fail an SEA. Under the current Phase 2 regulations, a manufacturer could fail an SEA after as few as 24 valid runs. However, review of more recently available indicates that false failures may occur if the decision is based on 24 runs. Therefore, we are proposing to require a minimum of 100 valid runs before a vehicle is deemed to have failed the SEA test.

While we believe that these changes and clarifications would largely address the manufacturers' concerns, we request comment on other possible improvements to the aerodynamic test procedures and compliance program.

2. Idle Reduction for Tractors

The Phase 1 version of GEM gives credit for idle emission reduction technologies that include a tamper-proof automatic engine shutoff system (AESS), with few override provisions. Phase 2 GEM gives credit for a wider variety of idle reduction strategies, recognizing technologies that are available on the market today, such as auxiliary power units (APUs), diesel fired heaters, and battery powered units. For example, a tamper-proof AESS with a diesel APU would be credited with a 4 percent reduction in emissions, while an adjustable AESS with a diesel fired heater would be credited with a 2 percent reduction in emissions (See 81 FR 73601, October 25, 2016).

We now realize that the regulations should also recognize combinations of these technologies. It is common for sleeper-cab tractors to include a combination of these technologies to address a broader range of ambient temperatures. For example, a fuel operated heater may be used for heating during the winter months, while a battery APU may be used for air conditioning in the summer. Therefore, we are proposing to add the following combinations of idle reduction technologies to Table 9 of § 1037.520. By adding these values to GEM, it would reduce the compliance burden for manufacturers who would otherwise need to pursue off-cycle credits for these technology combinations. The values of the proposed technology benefits were determined using the same methodology used in the Phase 2 final rule. [8] [9]

	Tamper-resistant		Adjustable	
Combination technology	Calculated credit (%)	GEM input	Calculated credit (%)	GEM input
Battery APU & Heater	6.3	6	5.1	5
Diesel APU & Heater	5.0	5	4.0	4
Stop-Start & Heater	4.6	5	3.7	4

3. Manufacturer Testing of Production Vehicles

The regulations will require tractor manufacturers to annually chassis test five production vehicles over the GEM cycles to verify that relative reductions simulated in GEM are being achieved in actual production. See 40 CFR 1037.665. We do not expect absolute correlation between GEM results and chassis testing. GEM makes many simplifying assumptions that do not compromise its usefulness for certification but do cause it to produce emission rates different from what would be measured during a chassis dynamometer test. Given the limits of correlation possible between GEM and chassis testing, we would not expect such testing to accurately reflect whether a vehicle was compliant with the GEM standards. Therefore, § 1037.665 does not apply compliance liability to such testing. Rather, this testing will be for informational purposes only. (81 FR 73638, October 25, 2016.)

The regulation also allows manufacturers to request approval of alternative testing ''that will provide equivalent or better information.'' Manufacturers have asked us to clarify this allowance. Therefore, we are proposing to explicitly allow CO_2 data

[8] U.S. Environmental Protection Agency. Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2: Regulatory Impact Analysis. EPA 420–R–16–900. August 2016. Section 2.4.8.1.1 Idle Control Technologies. Pages 2–49 through 2–53.

[9] Cullen, Angela. Memo to the Docket: Proposed Idle Reduction Technology Package Benefits. August 2019.

from in-use operation, and CO_2 data from manufacturer-run on-road testing. To qualify, the vehicles would need to be actual production vehicles rather than custom-built prototype vehicles. Such vehicles could be covered by testing or manufacturer owned exemptions but would need to be produced on an assembly line or other normal production practices. Manufacturers would also need to ensure test methods are sufficiently similar from year to year to allow for a meaningful analysis of trends.

4. Canadian Vehicle Standards

During the Phase 2 rulemaking, Environment and Climate Change Canada (ECCC) emphasized that the highway weight limitations in Canada are much greater than those in the U.S. Where the U.S. federal highways have limits of 80,000 pounds gross combined weight, Canadian provinces have weight limits up to 140,000 pounds. This difference could potentially limit emission reductions that could be achieved if ECCC were to fully harmonize with the U.S.'s HD Phase 2 standards because a significant portion of the tractors sold in Canada have GCWR (Gross Combined Weight Rating) greater than EPA's 120,000-pound weight criterion for ''heavy-haul'' tractors.

EPA addressed this in Phase 2 by adopting provisions that allow the manufacturers the option for vehicles above 120,000 pounds GCWR to meet the more stringent standards that reflect the ECCC views on appropriate technology improvements, along with the powertrain requirements that go along with higher GCWR (see 81 FR 73582, October 25, 2016). Vehicles in the 120,000 to 140,000 pound GCWR range would normally be treated as simple ''heavy haul'' tractors in GEM, which eliminates the GEM input for aerodynamics. However, vehicles certified to the optional standards would be classified as ''heavy Class 8'' tractors in GEM, which then requires an aerodynamic input. Nevertheless, they both use the heavier payload for heavy haul.

ECCC has since adopted final standards for these tractors, which differ from the optional standards finalized in Phase 2.[10] Since the purpose of these standards was to facilitate certification of vehicles intended for Canada, we are now proposing to revise our optional standards to be the same as the final ECCC standards. The proposed standards can be found in § 1037.670. Note that these standards are not directly comparable to either the normal Class 8 standards or the heavy haul standards of § 1037.106 because GEM uses different inputs for them.

ECCC has also adopted new standards for tractors in the 97,000 to 120,000-pound GCWR category. We request comment on the need for special provisions for these vehicles.

5. Vehicle Model Year Definition

For Phase 2 tractors and vocational vehicles, the vehicle's regulatory model year is usually the calendar year corresponding to the date of manufacture. However, the Phase 2 regulations allow the vehicle's model year to be designated to be the year before the calendar year corresponding to the date of manufacture if the engine's model year is from an earlier year.

After promulgation of the FRM, it became apparent that the Phase 2 vehicle model year definition does not allow starting a vehicle model year before January 1st of the named model year if the engine model year also begins in the earlier year. For example, if a manufacturer would start its 2024 engine model year in December 2023, the definition would not allow vehicles produced in 2023 to be model year 2024.

To address this issue, EPA is proposing to add back the option to allow the vehicle's model year to be designated to be the year after the calendar year of manufacture. In other words, we would allow manufacturers to meet standards earlier to ensure that engine and vehicle model years are aligned. Model years would still be constrained to reflect annual (rather than multi-year) production periods and include January 1 of the named year.

6. Compliance Margins for GEM Inputs

The regulations at 40 CFR 1037.620(d) allow components manufacturers to conduct testing for vehicle manufacturers, but they do not specify restrictions for the format of the data. Vehicle manufacturers have raised concerns about component manufacturers including compliance margins in GEM inputs—in other words, inputting a value that is significantly worse than the tested result. They state that many component suppliers are providing GEM inputs with compliance margins, rather than raw test results. However, when stacked together, the compliance margins would result in inappropriately high GEM results that would not represent the vehicles being produced.

In addressing this concern, it is important to distinguish between engine fuel maps (which are certified separately) and other GEM inputs that are not certified. As is discussed in Section I.B.2, certified engine fuel maps are expected to include compliance margins (albeit small margins). However, EPA did not expect each GEM input to have a significant compliance margin of its own. (Note that the aerodynamic bin structure serves to provide an inherent compliance margin for most vehicles.) Rather, we expected the certifying OEM to include compliance margins in their Family Emission Limits (FELs) relative to the GEM *outputs.*

For vehicle GHG standards, the primary role for FEL compliance margins is to protect against Selective Enforcement Audit (SEA) failures. Without a compliance margin under the Phase 2 regulations, normal production variability would cause some vehicles to fail, which would require the testing of additional vehicles. Even if the *family* ultimately passed the SEA, it would probably require the manufacturer to test a large number of vehicles. However, because SEAs for particular components would not target GEM inputs for other components, a modest compliance margin for the FEL would be sufficient to cover the full range of components.

While we are not proposing explicit changes with respect to compliance margins, we are proposing to revise the procedures for conducting an SEA for an axle or transmission apart from a specific vehicle. These revisions would further obviate a need for component-specific compliance margins.

Although we do not believe that suppliers should normally include compliance margins when providing test data to OEMs for GEM inputs, we do believe they should provide to OEMs some characterization of the statistical confidence they have in their data. This would allow the OEM to apply an appropriate overall compliance margin for their FEL.

Finally, none of this is intended to discourage suppliers and OEMs from entering into commercial agreements related to the accuracy of test results or SEA performance.

7. SEAs for Axles and Transmissions

Under 40 CFR 1037.320, a selective enforcement audit (SEA) for axles or transmissions would consist of performing measurements with a production axle or transmission to determine mean power loss values as

[10] Regulations Amending the Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations and Other Regulations Made Under the Canadian Environmental Protection Act, 1999: SOR/2018–98, Canada Gazette, Part II, Volume 152, Number 11, May 16, 2018.

declared for GEM simulations, and running GEM over one or more applicable duty cycles based on those measured values. The axle or transmission is considered passing for a given configuration if the new modeled emission result for every applicable duty cycle is at or below the modeled emission result corresponding to the declared GEM inputs. As described below, EPA is proposing to revise the consequences where an axle or transmission does not pass.

We believe special provisions are needed for axles and transmissions given their importance as compliance technologies and a market structure in which a single axle or transmission could be used by multiple certifying OEMs. Under the existing SEA regulations, if an axle or transmission family from an independent supplier fails an SEA, vehicle production could be disrupted for multiple OEMs and have serious economic impacts on them. We are proposing new regulatory text that would minimize the disruption to vehicle production.

Under the proposal, if the initial axle or transmission passes, then the family would pass, and no further testing would be required. This is the same as under the existing regulations. However, if the initial axle or transmission does not pass, two additional production axles or transmissions, as applicable, would need to be tested. Upon completion of the third test, the results of the three tests would be combined into a single map. This would become the official test result for the family. In other words, this proposed approach would correct the data used by the OEM for their end-of-year report.

We request comment on whether there are other components for which this approach would be appropriate.

8. Weight Reduction

The regulations in 40 CFR 1037.520 include tables to calculate weight reduction values for using certain lightweight components. The sum of the weight reductions is used as an input to GEM. EPA is proposing two changes to Table 8 of that section. First, we are proposing to allow manufacturers to use the heavy heavy-duty (HHD) values for medium heavy-duty (MHD) vehicles with three axles (*i.e.,* 6x4 and 6x2 configurations). These MHD vehicles typically share chassis components with HHD vehicles, but are classified as MHD because of the lighter duty engines. Second, we are proposing to add a footnote to the table to clarify that the weight reduction values apply per vehicle (instead of per component) unless otherwise noted.

9. Electric and Hybrid Vehicles in Vocational Applications

Manufacturers have expressed concern that the Phase 2 regulations are not specific enough regarding how to classify hybrid vocational vehicles (see 40 CFR 1037.140). This is not an issue for tractors, which are classified based on GVWR. However, vocational vehicles are generally classified by the class of the engines. Obviously, this approach does not work for electric vehicle without engines. This approach could also misrepresent a hybrid vehicle that is able to use an undersized engine. To address these problems, we are proposing to revise 40 CFR 1037.140(g) to clarify that hybrid vehicles are heavy heavy-duty vehicles if they are either propelled by a heavy heavy-duty engine and all other hybrid and electric vehicles are classified by GVWR class. We request comment on alternative approaches, such as specifying the useful life in hours rather than miles for these vocational vehicles, or allowing electric vehicles to step down one weight class, with justification from the manufacturer.

10. Vocational Vehicle Segmentation

The Phase 2 regulatory structure applies the primary vocational standards by subcategory based on drive cycles. The three subcategories are Regional, Multi-purpose, and Urban. Manufacturers are generally allowed to certify vocational vehicles in the particular duty-cycle subcategory they believe to be most appropriate, consistent with good engineering judgment. This process for selecting the correct subcategory is often called ''segmentation.'' Under this structure, EPA expects manufacturers to choose a subcategory for each vehicle configuration that best represents the type of operation that vehicle will actually experience in use. This is important because several technologies provide very different emission reductions depending on the actual in-use drive cycle. For example, stop-start would provide the biggest emission reductions for urban vehicles and much less reduction for vehicles that operate primary on long intercity drives.

Manufacturers have raised concerns about the impact of this structure on their ability to plan for and monitor compliance. They have suggested that more objective and quantitative good engineering judgment criteria would be helpful. In response to these concerns, EPA is proposing an interim ''safe harbor'' provision for vocational vehicle segmentation. Manufacturers meeting the safe harbor criteria described below would be presumed to have applied good engineering judgment.

The first principle of this safe harbor would be that any vehicle could be classified as Multi-purpose. The Multi-purpose duty cycle weighting factors include significant weightings for highway operation, lower speed transient operation, and idle. Thus, it would not generally overvalue an individual technology.

The second principle of this safe harbor would be that vehicles not classified as Multi-purpose should not be exclusively Regional or Urban. We are proposing a quantitative measure that evaluates the ratio of Regional vehicles to Urban vehicles within an averaging set. Specifically, ratio of Regional vehicles to Urban vehicles must be between 1:5 and 5:1. An equivalent way of saying this is that the number of Regional vehicles divided by the number of Urban vehicles would need to be between 0.20 and 5.0.

We believe this safe harbor would be consistent with the intent of the Phase2 program and would not allow manufacturers to reduce the effective stringency the standards. Nevertheless, EPA requests comment on this approach overall and the range of acceptable ratios. We also request comment on how to handle specialty manufacturers that have a less diverse product offerings. Finally, we request comment on the need for the subcategory on the label and whether or not we should allow manufacturers to reassign subcategories for their end-of-year ABT reports.

11. Early Certification for Small Manufacturers

Vehicle manufacturers that qualify as small businesses are exempt from the Phase 1 standards, but must meet the Phase 2 standards beginning in 2022. However, some vehicle families have been certified voluntarily to Phase 1 standards by small manufacturers. In an effort to encourage more voluntary early certification to Phase 1 standards, we are proposing to adopt a new interim provision in § 1037.150(y)(4) for small manufacturers that certify their entire U.S.-directed production volume to the Phase 1 standards for calendar year 2021. If the small manufacturers do so, the proposed provision would then allow these manufacturers to certify to the Phase 1 standards for model year 2022 (instead of the otherwise applicable Phase 2 standards). Early compliance with the Phase 1 standards should more than offset any reduction in benefits for model year 2022 (although the magnitude of any impact on air quality would be small because

of the small production volumes that would be involved).

The proposed provision would also allow the Phase 1 vehicle credits that small manufacturers generate from model year 2018 through 2022 vocational vehicles to be used through model year 2027. Under the existing regulations, all manufacturers that generate credits under the Phase 1 program are allowed to use such Phase 1 vehicle credits in the Phase 2 vehicle averaging, banking, and trading program, but the credits are subject to the five-year credit life. The limit on credit life can be problematic for small manufacturers with limited product lines which allow them less flexibility in averaging. We believe the longer credit life would provide them the flexibility they would need to ensure all of their products are fully compliant by the time the Phase 2 standards are fully phased in for model year 2027.

We request comment on these proposed changes and any potential impact.

12. Other Minor Heavy-Duty Vehicle Amendments

EPA is proposing four additional amendments to part 1037:

- *Self-contained air conditioning units.* We are proposing to revise § 1037.115(e) to clarify that it is intended to address air conditioning systems for which the primary purpose is to cool the driver compartment. This would generally include all complete pickups and vans, but not self-contained air conditioning or refrigeration units on vocational vehicles.
- *Warranty.* We are proposing to revise § 1037.120(b) to correct the text with respect to tires and Heavy Heavy-Duty vehicles.
- *Drayage tractors.* We are proposing to revise § 1037.140(aa) to clarify the production limit for drayage tractors under the custom chassis allowance.
- *Neutral idle.* We are proposing to revise § 1037.660(a)(2) to specify the permissible delay before engaging neutral idle when the vehicle is stopped.

D. Requests for Comment on Phase 2 Regulations

EPA is soliciting comments on other potential amendments, including those described in this Section II.D. We also welcome comments on the need for other technical corrections and clarifications. Readers are reminded to review public comments placed in the docket, which may contain requests for other corrections and clarifications.

1. Vocational Engines and Credits

In 40 CFR 1036.150(p), EPA provides special flexibility for engine manufacturers that certify all their model year 2020 engines within an averaging set to the model year 2021 FTP and SET standards and requirements. GHG emission credits those manufacturers generate with model year 2018 through 2024 engines may be used through model year 2030, instead of being limited to a five-year credit life as specified in § 1036.740(d). They will also be allowed to certify model year 2024 through 2026 tractor engines to alternative standards that are slightly higher than the otherwise applicable standards.

The choice would be made when certifying MY 2020 engines. Instead of certifying engines to the final year of the Phase 1 engine standards, manufacturers electing the alternative would indicate that they are instead certifying to the MY 2021 Phase 2 engine standard. Because these engine manufacturers would be reducing emissions of engines otherwise subject to the MY 2020 Phase 1 engine standards (and because engine reductions were not reflected in the Phase 1 vehicle program), there would be a net benefit to the environment. These engines would not generate credits relative to the Phase 1 standards (that is, MY 2020 engines would only use or generate credits relative to the pulled ahead MY 2021 Phase 2 engines standards). Because the vehicle standards themselves are unaffected, these voluntary standards would not reduce the GHG reductions or fuel savings of the program. Vehicle manufacturers using the alternative MYs 2024–2026 engines would need to adopt additional vehicle technology (*i.e.,* technology beyond that projected to be needed to meet the engine standard) to meet the applicable vehicle GHG standards. This means the vehicles would still achieve the same fuel efficiency in use.

EPA did not adopt a similar provision for alternative MY 2024–2026 standards for vocational engines due to concerns about windfall credits. However, given our proposed amendment to address these windfall credits (Section I.B.1), we are asking for comment on the possibility of a similar set of alternative standards for vocational engines, as shown in the following table:

Model years	Medium heavy-duty vocational	Heavy heavy-duty vocational
2020–2023	545 g/hp-hr	513 g/hp-hr.
2024–2026	542 g/hp-hr	510 g/hp-hr.

As noted in the Phase 2 FRM, EPA views this type of alternative as being positive from the environmental and energy conservation perspectives, while providing significant flexibility for manufacturers that may reduce their compliance costs. (81 FR 73499, October 25, 2016)

2. Stop-Start Overrides

Stop-start systems are an important technology to reduce unnecessary idling, such as when a vehicle is stopped at a traffic light. In 40 CFR 1037.660, we specify how these systems must operate in order to qualify for GEM credit. Included among those provisions are allowances for overriding the automatic engine shutdown where it would otherwise create a potential system damage or safety issue for the engine or driver. Manufacturers have asked us to include additional overrides needed to ensure safe and effective vehicle operation. Specifically, they have asked us to consider overrides for the following conditions, which we are requesting comment on:

- Driveline engaged (to prevent driveline and/or starter damage)
- Automatic transmission not in D (to reduce engine and transmission loading)
- Automatic transmission in P or N (to prevent depleting the battery)
- Turn signal activated (to prevent engine stop with the vehicle in intersection)
- Hazard warning signal activated (to prevent engine stop during limp-home mode)
- SCR thawing (to allow thawing of frozen DEF)
- High steering angle (to avoid steering wheel kickback during engine start)
- ABS wheel speed sensor failure (to ensure detection of vehicle speed)
- Hard braking event (to avoid startling the driver after an event)
- Road grade greater than 7% (to prevent vehicle rollback)

3. Delegated Assembly

In 40 CFR 1037.621, EPA specifies provisions to allow manufacturers to ship incomplete vehicles and delegate the final assembly to another entity. Manufacturers have expressed the concern that these ''delegated assembly'' requirements are too burdensome in some cases, particularly in cases such as auxiliary power units and natural gas fuel tanks. EPA requests comment on this issue.

4. Certification Reporting Requirements

EPA requests comment on whether and how to revise the text to simplify or clarify the provisions in 40 CFR 1037.205 that require the inclusion of GEM results and credit projections in applications for certification.

5. Mild Hybrid Certification

Under the Phase 2 regulations, manufacturers must conduct powertrain testing if they wish to take credit for hybrid systems, including mild hybrid systems. However, manufacturers have expressed concerns about the cost of powertrain testing and that the existing procedure may not measure improvements from certain mild hybrid systems. EPA requests comment on alternative means of evaluating mild hybrids. Manufacturers have asked EPA to consider the following options:

- Allow manufacturers to test a powertrain and apply analytically-derived scaling factors to others (*e.g.,* scale by fraction of battery capacity or motor capacity) under 40 CFR 1037.235(h).
- Allow manufacturers to use international test procedures for battery capacity, motor power, and motor efficiency.
- Provide smaller credit (potentially with a volume limit and/or only for limited time) in exchange for less testing (*e.g.,* reduced benefit when using the simplified model spreadsheet that is available under docket no. EPA–HQ–OAR–2014–0827–2109).

6. Transmission Calibrations

Manufacturers with advanced transmission calibrations may use the powertrain test option in § 1037.550 to demonstrate the performance of their transmissions. We adopted this option to provide an incentive for the development of advanced transmissions with sophisticated calibrations.

Transmission manufacturers have developed some new efficient calibrations, but must also maintain less efficient calibrations to address special types of operation. Due to concerns about resale value, most customers want to retain the ability to select the correct calibration for their operation. For transmissions with such selectable calibrations, § 1037.235(a) requires that they test using the worst-case calibration, which can undermine the incentive to continue improving the calibrations. Therefore, we are requesting comment on allowing manufacturers to measure both the best- and worst-case calibrations and weight them based on survey data, or other appropriate means. Commenters are encouraged to address whether such an allowance would change the effective stringency of the standards.

7. Data Requirements for Hydrogen-Fueled Vehicles

We request comment on whether special provisions are needed for hydrogen-fueled vehicles. Currently GEM simulation is required for these vehicles, although by using a non-carbon fuel, simulating the vehicle with GEM would result in zero CO_2 emissions. We request comment on whether or not to change our current approach.

E. Other Heavy-Duty Highway Amendments

This proposed rule includes other amendments related to heavy-duty highway engines. For example, we are updating the regulations for certification fees as described in Section III.C. We are also proposing or soliciting comment on additional amendments as described in the following sections.

1. Onboard Diagnostics (OBD)

EPA's OBD regulations for heavy-duty engines are contained in 40 CFR 86.010–18, which was promulgated February 24, 2009 (74 FR 8310). Although these regulations were originally harmonized with CARB's OBD program, CARB has made changes to their regulations which EPA has not adopted. In several cases, CARB has added flexibility to its regulations. We are requesting comment generally on the differences between EPA and CARB regulations, in addition to the specific issues identified below.

More recently CARB has proposed additional revisions and is expected to finalize them this year.[11] We also request comment on these more recent CARB changes.

We request comment on the new definitions proposed by CARB at 13 CCR 1971.1(c), including the definitions for ''alternate phase-in'', ''diagnostic or emission critical electronic control unit'', and ''smart device''.

[11] Information is available at *https://ww2.arb.ca.gov/rulemaking/2018/heavy-duty-board-diagnostic-system-requirements-2018.*

EPA is requesting comment on California's approach to approving deficiencies during a model year. In § 1971.1(k)(6.1.1) of their regulations, CARB states:

> The manufacturer may request a retroactive deficiency until either of the following dates, whichever is later:
> (A) When the last affected engine or vehicle is produced, or on December 31 of the calendar year for which the model year is named, whichever is sooner; or
> (B) 6 months after commencement of the start of engine production or vehicle production, whichever is later.

Our current regulations do not allow for retroactive deficiencies. EPA is requesting comment on whether to adopt CARB's approach.

We are proposing to adopt the CARB 5% threshold for misfire in § 86.010–18(g)(2), and to adopt the additional flexibility provided by CARB for misfires in 13 CCR 1971.1(e)(2.3.3). This would allow manufacturers to not detect misfires under certain conditions, such as during aftertreatment regeneration and some low temperature operation.

We are proposing to revise our in-use compliance standards in § 86.010–18(p) to reflect the CARB approach for minimum ratios for representative samples. Under the proposed text, an OBD system would not be considered noncompliant unless a representative sample indicates the in-use ratio is below 0.088.

CARB has developed reporting templates for its OBD requirements. EPA is proposing to allow manufacturers to use these templates for reporting to EPA, and we are requesting comment on whether regulatory changes are needed. See CARB Mail-Out #MSC 09–22 as amended on 18-Apr-2019.

Our OBD regulations rely on several standard procedures developed by SAE International, as specified in § 86.010–18(k). The regulations also reference a standard of the International Organization for Standardization (ISO). We request comment on the need to update these procedures to more recent versions as summarized below.

SAE procedure	Version currently cited	Latest version
SAE J1930	2002	2017
SAE J1939	2007	2017
SAE J1939–13	2004	2016
SAE J1939–73	2006	2017
SAE J1962	2002	2016
SAE J1978	2002	2002
SAE J1979	2007	2017
SAE J2012	2002	2016
SAE J 2403	2007	2014
ISO 15765–4:2005(E)	2005	2011

In § 86.010–18(l), EPA specifies testing requirements for demonstrating the performance of monitoring systems. The amount of testing required depends on the number of engine families a manufacturer certifies in a given model year. CARB regulations include equivalent requirements, and our intent is to allow the use of test data generated for CARB. We are proposing to revise our regulations to state that CARB-certified configurations do not count as separate engine families for the purposes of this provision.

EPA is proposing to revise § 86.010–18(a) and (m) to allow a simplified carryover OBD certification path intended for special engine families, such as those certified for export to Canada. This proposed provision is similar to the allowance to show compliance with § 86.010–18 based on CARB certification. To make use of either alternative, the manufacturer must demonstrate to the Administrator how the OBD system they intend to certify meets the intent behind all the requirements of § 86.010–18.

These amendments address heavy-duty engines used in vehicles with GVWR above 14,000 pounds. We request comment on the need for similar changes for engine-certified heavy-duty engine families subject to 40 CFR 86.007–17 and 86.1806–17.

2. Smoke Standards and Smoke Measurement Procedures

Diesel heavy-duty highway engines have been subject to smoke standards in addition to brake-specific emission standards for many years. The current exhaust emission standards for particulate matter (PM) cause manufacturers to apply calibrations and emission control strategies that reduce PM from the exhaust to very low levels. There is some relationship between brake-specific PM emissions and smoke, but they are not inherently linked. Nevertheless, modern engines with very low PM emissions have very low smoke levels when properly maintained. Thus, we do not believe smoke standards achieve any emission reductions beyond those that result from DPF-forcing PM standards.

Manufacturers submit smoke data with certification, but smoke testing is not required for selective enforcement audits with production engines. Some state programs continue to rely on smoke measurement to screen for high-emitting trucks. However, these state testing programs are separate from EPA certification, so we do not expect the state programs to depend on EPA certification for smoke standards. We therefore request comment on removing the smoke standard as a certification requirement for heavy-duty highway engines. We particularly request comment on the EPA smoke standard and its relationship to state testing programs.

There are also questions about the smoke test procedures. The smoke test procedures are specified in 40 CFR part 86, subpart I. These procedures were first adopted almost 50 years ago and have remained largely unchanged since that time. They currently apply for locomotives (40 CFR part 1033) and some land-based nonroad diesel engines (40 CFR part 1039). To the extent these procedures continue to apply, we may undertake a future rulemaking to update these procedures and include them in 40 CFR part 1065 along with the other test procedures for measuring exhaust emissions from test engines. We request comment on appropriate changes to ensure that these measurement procedures reflect currently available instruments and practices, without causing the measured values to redefine the stringency of existing standards.

3. Migration From 40 CFR Part 86, Subpart A

EPA created 40 CFR part 86 in 1976 to reorganize emission standards and certification requirements for light-duty and heavy-duty highway vehicles and engines. In 1985, EPA adopted new standards for heavy-duty highway engines, codifying the standards in 40 CFR part 86, subpart A, along with the standards and certification procedures for light-duty vehicles and light-duty trucks.[12] Since then, EPA has adopted several rules to set new and more stringent standards for both light-duty and heavy-duty emission control programs and to add or revise certification procedures. However, the original regulatory structure was not well-suited to handle the number of revisions that occurred over time.

To improve clarity for regulated parties, EPA has been planning to migrate the highway heavy-duty engine standards and certification requirements to 40 CFR part 1036.[13] We expect to propose that migration in a separate rulemaking. The general approach will be to keep the essential regulatory elements in 40 CFR part 86, subpart A, but to streamline and update the regulatory provisions to align with best practices and other current provisions that apply for nonroad engines (such as 40 CFR parts 1033, 1039, and 1042). We believe this technical amendment rulemaking is a good opportunity to solicit input on principles and opportunities for eventually adopting those updated regulations in 40 CFR part 1036.

The migration of regulatory provisions to 40 CFR part 1036 is planned for a future rulemaking because it necessitates a thorough investigation of the provisions that currently apply to heavy-duty engines under 40 CFR part 86. A memo in the docket for this proposal describes a range of possible regulatory amendments we could eventually adopt to reorganize the provisions within 40 CFR part 86, subpart A, eliminate obsolete content, and improve the readability of the remaining provisions.[14] We request comment on those regulatory changes, and on the value of making these changes in this rulemaking, considering that these changes will apply only for the limited time that 40 CFR part 86, subpart A, continues to apply.

III. Other Amendments

A. Ethanol-Blend Test Fuels for Nonroad Spark-Ignition Engines and Vehicles, Highway Motorcycles, and Portable Fuel Containers

EPA adopted exhaust and evaporative emission standards for gasoline-fueled nonroad engines, vehicles, and equipment before there was a federal gasoline test fuel with 10 percent ethanol (E10). Most of those programs therefore relied on testing with neat gasoline (E0) or with a splash-blended mix of neat gasoline and ethanol to make E10. In the meantime, EPA adopted a federal gasoline test fuel with 10 percent ethanol for testing motor vehicles (79 FR 23414, April 28, 2014).

California ARB adopted its own specification for an E10 test fuel for testing motor vehicles, referred to as ''LEV III E10.'' California ARB revised its nonroad emission control programs to require manufacturers to start using LEV III E10 test fuel for certification starting in model year 2020, without allowing for carryover of previous data from testing with neat gasoline. California ARB's move to require use of LEV III E10 test fuel for certification has

[12] Emission standards for heavy-duty highway engines were first adopted by the Department of Health, Education, and Welfare in the 1960s. These standards and the corresponding certification and testing procedures were codified at 45 CFR part 1201. In 1972, shortly after EPA was created as a federal agency, EPA published new standards and updated procedures while migrating the regulations to 40 CFR part 85 as part of the effort to consolidate all EPA regulations in a single location.

[13] 40 CFR part 1036 was created in 2011 as part of the Phase 1 GHG rulemaking (76 FR 57381, September 15, 2011).

[14] ''Draft Regulatory Text to Update and Reorganize 40 CFR part 86, subpart A'', EPA memorandum from Alan Stout to Docket EPA–HQ–OAR–2019–0307, January 23, 2020.

led manufacturers to express a concern about the test burden associated with separate testing to demonstrate compliance with EPA and California ARB emission standards.

The concern for aligning test requirements related to test fuel applies for marine spark-ignition engines (40 CFR part 1045), nonroad spark-ignition engines above 19 kW (40 CFR part 1048), and recreational vehicles (40 CFR part 1051).[15] We expect a similar situation to apply for highway motorcycles in the 2022–2025 time frame based on California ARB's plans for further rulemaking activity. In addition, we believe it is best to update evaporative emission test procedures for equipment using nonroad spark-ignition engines (40 CFR part 1060) to allow for using EPA' specified E10 test fuel instead of relying on splash-blending ethanol with EPA's specified E0 gasoline test fuel (known as indolene).

We have issued guidance for marine spark-ignition engines (40 CFR part 1045) [16] and for recreational vehicles (40 CFR part 1051) [17] describing how we may approve certification based on emission measurements with an E10 test fuel. We are proposing to revise 40 CFR parts 1045, 1048, and 1051, consistent with the recently issued guidance documents, to allow for certification based on emission measurements with EPA's E10 test fuel without requiring EPA approval, and without adjusting emission standards to account for fuel effects. For marine spark-ignition engines (40 CFR part 1045), this merely replaces the existing provision allowing for the alternative of using a splash-blended E10 test fuel. For recreational vehicles (40 CFR part 1051) and Large SI engines (40 CFR part 1048), naming EPA's E10 specification as the alternative test fuel is a new provision. As originally adopted for Marine SI engines, EPA would always be able to do confirmatory testing with either the original E0 test fuel, or the manufacturer's selected alternative fuel.

We are also proposing to allow the same approach for certification based on emission measurements with EPA's E10 test fuel for highway motorcycles (including EPA confirmatory testing with either E0 or E10).

Manufacturers may want to test with California ARB's LEV III E10 test fuel instead of EPA's E10 test fuel. The two sets of fuel specifications are nearly identical, except that the EPA E10 test fuel has a higher volatility. For testing hot-stabilized engines, volatility has a very small effect on exhaust emissions. As a result, we would expect to approve a manufacturer's request to use LEV III E10 test fuel instead of EPA's E10 test fuel under 40 CFR 1065.701(b). This provision allows EPA to approve a different test fuel if it does not affect a manufacturer's ability to show that its engines will comply with all applicable emission standards using the fuel specificed in the subpart. This would apply if fuel's effect on emissions is small enough to allow for using the test results to show that engines would meet applicable emission standards with the specified fuel. Since there are no appreciable fuel effects on exhaust emissions between EPA's E10 test fuel and LEV III E10 test fuel, we would expect this approval process to be straightforward.

We expect this approach of allowing E10 as an alternative test fuel to adequately address concerns for the identified sectors. Many of these engines have closed-loop fuel controls that reduce the effect of fuel variables on exhaust emissions. Many also have relatively large compliance margins relative to the standards that apply. These factors help manufacturers confidently test with E10 as an alternative fuel, knowing that they continue to be liable for meeting emission standards on the specified E0 test fuel.

EPA has an interest in transitioning all emission measurements for gasoline-fueled engines to an E10 test fuel. However, modifying the emission control program by allowing (or requiring) a complete compliance demonstration based on an E10 test fuel would require a more careful assessment of the fuel effects from the ethanol added to the test fuel. Since the ethanol in some cases has significant effects on HC, NO_X, and CO emissions, we would need to evaluate the resulting effects on the stringency of the standards. We would generally expect to adopt adjusted standards with the objective of maintaining equivalent stringency. Developing such alternative standards for an E10 test fuel would require a large body of data to adequately capture the fuel effects on emissions for all the different classes of highway motorcycles, for all the different types of nonroad engines and vehicles, and for different kinds of engine technology within the various sectors. We took this approach for nonroad spark-ignition engines below 19 kW by adopting alternative CO standards that apply for testing with LEV III E10 test fuel (78 FR 36397, June 17, 2013).

Toward that end, we have prepared a memorandum with a collection of available emission data from nonroad engines and highway motorcycles tested with E0 and E10 test fuels.[18] The data include results from programs conducted by industry associations, EPA efforts with Canadian labs, and other U.S. laboratory data. We solicit additional emission data to further help establish the comparison between the test fuels for different engine types, applications, and technologies. We also request comment on the benefits or concerns with adopting alternative standards that correspond with a change to require E10 test fuel for all testing (both for manufacturers and EPA). Available information suggests that the fuel-related emission effects for technologies across these sectors are much more complex and varied than we observed for Small SI engines. Some technology differences, such as two-stroke vs. four-stroke and naturally aspirated vs. turbocharged, have relatively consistent and predictable fuel-related emission effects. However, some technologies will have fuel-related emission effects that depend on specific design strategies. For example, manufacturers can use electronic controls to optimize for power, fuel economy, low-speed torque, or some other measure of performance. Partial use of closed-loop control of air-fuel ratios is one clear example of this, with the potential to adjust the air-fuel ratio to different setpoints, or to limit closed-loop control only to certain operating conditions. We request comment on how best to account for these design-specific engine technologies in evaluating fuel-related emission effects for each type of engine.

The emission effects are most pronounced for CO emissions, but we are also interested in HC and NO_X emissions. To the extent that NO_X emissions (or HC + NO_X emissions) increase to a degree that affects the stringency of the standards, we would consider increasing the numerical level of the standard to maintain equivalent stringency.

EPA also specifies test fuels for evaporative emission testing. The gasoline test fuel for measuring

[15] EPA adopted amendments to address these concerns for nonroad spark-ignition engines at or below 19 kW in an earlier rulemaking (80 FR 9114, February 19, 2015).

[16] ''Marine Spark Ignition Engine Certification Testing with California ARB E10 Test Fuel,'' EPA guidance document CD–18–15, December 24, 2018.

[17] ''Off-Highway Recreational Vehicle Certification Testing with California ARB E10 Test Fuel,'' EPA guidance document CD–19–03, April 22, 2019.

[18] ''Collection of E0/E10 Emission Data for Current Certified Nonroad Sector Engines and On Highway Motorcycles'' EPA memorandum from Cheryl Caffrey to Docket EPA–HQ–OAR–2016–0604, December 6, 2019.

permeation emissions from nonroad fuel tanks and fuel lines is a splash-blended E10. The is an E0 test fuel that is blended to reach a 10 percent concentration of ethanol. The splash-blended E10 test fuel is nearly identical to EPA's specified E10 test fuel except for the volatility. EPA's Tier 3 E10 test fuel has a nominal volatility of 9 psi RVP and the splash-blended E10 has a volatility of about 10 psi RVP.[19] We request comment on amending the regulation to allow testing with the pre-mixed E10 test fuel with 9 psi RVP instead of the splash-blended E10 test fuel with 10 psi. In particular, we encourage commenters to share any available data describing how gasoline volatility affects permeation rates. We would not want manufacturers to test with lower fuel volatility if it decreases permeation rates and allows manufacturers to use a less effective control technology. We also request comment on the level of interest that manufacturers or testing organizations would have to be able to use EPA's pre-mixed E10 test fuel in the near term, or at any point in the future. We are concerned about issues related to test burden for manufacturers needing to meet standards, but we invite commenters to share their insights on these questions of permeation chemistry. If the final rule includes an amendment to allow permeation testing with EPA's pre-mixed E10 test fuel, we would also expect to specify that California ARB's LEVIII E10 test fuel is also acceptable for demonstrating compliance with permeation standards (see § 1060.505(c)(2)).

A different dynamic applies for *diurnal* testing. This measurement procedure applies for Marine SI fuel tanks and for some Large SI equipment. We currently specify an E0 test fuel with a nominal volatility of 9 psi RVP for diurnal testing in 40 CFR 1060.525. The volume of vapor venting during a diurnal test depends on the volatility of the test fuel. Changing the ethanol content of the fuel without changing the volatility should cause no significant change in the volume of vapor venting during the diurnal test. The specified EPA E10 test fuel has the same volatility as the E0 test fuel, but it has the added ethanol. We request comment on amending the regulation to allow testing with the specified EPA E10 test fuel instead of the E0 test fuel. As described for permeation testing above, we would not want manufacturers to use a test fuel that would decrease vapor pressures and allow manufacturers to use a less effective control technology. We also request comment on the level of interest that manufacturers or testing organizations would have to be able to use EPA's specified E10 test fuel in the near term, or at any point in the future.

We specify emission standards and test procedures for portable fuel containers in 40 CFR part 59, subpart F. The test relies on a splash-blended E10 test fuel. California ARB specifies their LEV III gasoline test fuel for the analogous procedures in California, but they allow manufacturers to submit data instead using EPA's specified test fuel. Accordingly, we believe manufacturers do not face the same burden of needing to perform duplicate measurements for the two agencies. We are therefore not proposing to change the EPA test fuel for portable fuel containers. However, we request comment on allowing manufacturers the option of using EPA's specified E10 test fuel to demonstrate compliance with the combined test for diurnal and permeation emissions.

B. Removing Obsolete CFR Content

EPA first adopted emission standards for light-duty motor vehicles and heavy-duty highway engines in the 1970s. Emission standards for the first categories of nonroad engines started to apply in the 1990s. Each of these programs include emission standards that apply by model year. For most of these programs over time, engines and vehicles were subject to increasingly stringent standards and improved certification and testing requirements. All these standards and regulatory provisions are codified in the Code of Federal Regulations. As time passes, the regulations for past model years become obsolete, but it remains in print until there is a rulemaking change to remove it from print. We are proposing in this rule to remove large portions of this regulatory content that no longer applies. The following sections describe these changes for different sectors.

Note that Section III.D describes several amendments to emission control programs for motor vehicles in 40 CFR parts 85 and 86. These amendments include several provisions that also remove obsolete regulatory content.

1. Clean Fuel Fleet Standards (40 CFR Part 88)

The Clean Air Act Amendments of 1990 included numerical standards for the Clean Fuel Fleet program that were intended to encourage innovation and reduce emissions for fleets of motor vehicles in certain nonattainment areas as compared to conventionally fueled vehicles available at the time. As originally adopted, those Clean Fuel Fleet standards were substantially more stringent than the standards that applied to vehicles and engines generally.

Now that we have begun implementing Tier 3 standards in 40 CFR part 86, subpart S, the Clean Fuel Fleet standards are either less stringent than or equivalent to the standards that apply to vehicles and engines generally. Because the statute continues to require Clean Fuel Fleet standards for state clean-fuel vehicle programs, we cannot simply remove the Clean Fuel Fleet program from the regulations. Rather, we are proposing to implement the Clean Fuel Fleet standards in 40 CFR part 88 with a compliance option where vehicles and engines certified to current standards under 40 CFR part 86 and part 1036 would be deemed to comply with the Clean Fuel Fleet standards as Ultra Low-Emission Vehicles. Further, the Clean Fuel Fleet program as adopted included labeling requirements for engine and vehicle manufacturers to identify compliant engines and vehicles, and a restriction against including such engines or vehicles when calculating emission credits. Both provisions would also no longer be applicable because of the earlier mentioned increased stringency of standards for engines and vehicles, and under the compliance option we are proposing. Therefore, we are also proposing to remove these regulations. This will give clear instructions to vehicle and engine manufacturers as well as states that continue to have Clean Fuel Fleet provisions in their State Implementation Plans or become subject to these requirements in the future under CAA sections 182(c)(4)(A) and 246(a).

For states with areas that become subject to the clean-fuel vehicle program requirements in the future based on a new designation as an ozone nonattainment area, the required state implementation plan submission for the program or for a substitute measure is due within 42 months after the effective date of an area's nonattainment designation. The clean-fuel vehicle program requirements apply for ozone nonattainment areas with an initial designation as Serious, Severe, or Extreme. For marginal and moderate ozone nonattainment areas that are reclassified as Serious, Severe, or Extreme, the required state implementation plan submission for the program or for a substitute measure is due on the date specified in the EPA rulemaking finalizing the area's reclassification.

[19] Fuel volatility is based on Reid Vapor Pressure (RVP), which generally quantifies a fuel's equilibrium vapor pressure at 100 °F. A fuel with volatility of 9 psi would therefore have an equilibrium vapor pressure of about 9 psi at 100 °F.

The Clean Fuel Fleet program also depends on vehicle classifications that include Zero Emission Vehicles and Inherently Low-Emission Vehicles. We are therefore preserving these defined terms in 40 CFR part 88. We are proposing to consider as Zero Emission Vehicles all electric vehicles and any vehicle that does not emit NO_X, PM, HC, CO, or formaldehyde (including evaporative emissions). We are proposing to simplify the definition of Inherently Low-Emission Vehicles to mean any certified vehicle that is designed to not vent fuel vapors to the atmosphere.

2. Legacy Nonroad Standards (40 CFR Parts 89 Through 94)

The 1990 amendments to the Clean Air Act authorized EPA to set emission standards for nonroad engines. This led to a series of rulemakings to adopt emission control programs for different nonroad sectors. From 1994 through 1999, EPA adopted these emission control programs in 40 CFR parts 89, 90, 91, 92, and 94 (all part of Subchapter C).

Starting in 2002, EPA adopted emission standards for additional nonroad emission control programs in a new subchapter, which allowed for improved organization and harmonization across sectors. We codified these new standards and related provisions in 40 CFR parts 1048, 1051, 1065, and 1068 (all part of Subchapter U). Since then, we have migrated the ''legacy'' emission control programs from Subchapter C to Subchapter U. In each case, the migration corresponded to new emission standards and substantially updated compliance and testing provisions. This applies for the following sectors:

Sector	Legacy regulation	Current regulation
Land-based nonroad diesel engines	40 CFR part 89	40 CFR part 1039.
Nonroad spark-ignition engines at or below 19 kW	40 CFR part 90	40 CFR part 1054.
Marine spark-ignition engines	40 CFR part 91	40 CFR part 1045.
Locomotives and locomotive engines	40 CFR part 92	40 CFR part 1033.
Marine diesel engines	40 CFR part 94	40 CFR part 1042.

As a result of this migration, engine manufacturers have not certified engines under the legacy parts for the last 5–10 years. Removing these legacy parts reduces the cost to the Agency and prevents confusion for readers who think that the provisions still apply.

While EPA's engine certification programs don't rely on these obsolete provisions, the new programs refer to the legacy parts for some specific provisions. For example, the new standard-setting part for each type of engine/equipment allows manufacturers to continue to certify carryover engine families based on test data from procedures specified in the legacy parts. We are not proposing to discontinue further use of carryover data from engines originally certified under the legacy parts. On the other hand, this provision will gradually sunset itself as manufacturers update engine designs and perform new testing for their engine families to meet current standards. Considering California's initiative to disallow carryover for nonroad spark-ignition engines starting in model year 2021, we request comment on taking a more direct approach that would sunset carryover based on testing performed according to the legacy parts.

Another example of relying on the legacy parts in the new regulations is emission credits generated under the legacy parts. In most cases, current programs either disallow using those credits for certification, or they allow it without keeping separate accounts for credits generated under the legacy parts. We are proposing no changes where credits from legacy parts are either unavailable or indistinguishable from currently generated credits. One exception is for land-based nonroad diesel engines certified under 40 CFR parts 89 and 1039. Current provisions in § 1039.740 allow for limited use of Tier 2 and Tier 3 credits from part 89 for certifying Tier 4 engines. However, these constraints are not time-limited. Now that the Tier 4 standards have been in place for several years, we would be interested in simplifying the credit accounting by sunsetting these provisions. We therefore request comment on the extent to which any manufacturers might rely on continued use of Tier 2 or Tier 3 emission credits for certifying their land-based nonroad diesel Tier 4 engines.

We are also aware that other federal and state regulations and compliance programs include numerous references to 40 CFR parts 89 through 94. To address this, we are proposing to replace the full text of regulations in the legacy parts with a paragraph describing the historical scope and purpose for each part. The remaining paragraph also directs readers to the new regulations that apply in Subchapter U, and clarifies how the regulatory requirements transition to the new content. As an example, the statute and regulations prohibit tampering with certified engines throughout an engine's lifetime, even if the original text describing that prohibition no longer resides in its original location in the Code of Federal Regulations.

We are also proposing to capture the emission standards from the legacy parts as reference material in an appendix in the appropriate CFR parts. This allows for readily citing the historical standards in our own emission control programs, and in any other federal or state regulations or compliance materials that depend on citing emission standards that are no longer current for purposes of gaining EPA certification as part of our nonroad emission control program.

In addition to removing references to the legacy parts, we are taking the opportunity to remove additional obsolete content from the newer regulations. Most of these changes were adopted to address temporary concerns as part of transitioning to new standards or other new requirements. We adopted these changes in isolated regulatory sections as ''interim provisions.'' Most of these interim provisions have been obsolete for several years.[20]

References to the legacy parts are especially common for stationary engines EPA regulates under 40 CFR part 60, subpart IIII and subpart JJJJ. The emission standards for stationary engines in many cases rely on current or past nonroad emission standards in 40 CFR parts 89, 90, and 94. Including all the iterations of these emission standards as reference material allows us to preserve the existing set of standards and requirements for

[20] A docket memo includes redline text to highlight all the changes to the regulations in the proposed rule. This is especially helpful for reviewing provisions that we are removing from the CFR. See ''Redline Document Showing Proposed Changes to Regulatory Text in the Heavy-Duty Greenhouse Gas Amendments'', EPA memorandum from Alan Stout to Docket EPA–HQ–OAR–2019–0307. For obsolete provisions we are removing, see especially 40 CFR 1027.105, 1033.150, 1042.145, 1045.145, 1048.145, 1051.145, 1054.145, and 1054.625.

stationary engines. The proposed regulations include numerous amendments to 40 CFR part 60 to change regulatory cites from the legacy parts to the new regulatory parts in Subchapter U.

Most of the changes for stationary engines in 40 CFR part 60 are intended to update references without changing standards or other provisions. We are proposing two more substantive changes. First, we are proposing to allow manufacturers of emergency stationary compression-ignition internal combustion engines and stationary emergency spark-ignition engines to certify using assigned deterioration factors. Since these emergency engines generally serve in standby status in anticipation of emergency situations, they often have lifetime operation that is much less extensive than non-emergency engines. Assigned deterioration factors would allow manufacturers to demonstrate the durability of emission controls without performing testing that might otherwise exceed the operating life of the engines being certified.

Second, stationary spark-ignition engines are currently subject to emission standards and certification procedures adopted under 40 CFR part 90 for Phase 1 engines. Revising the requirements for these engines to instead rely on the certification procedures in 40 CFR part 1054 requires that we identify the Phase 1 standards as not including the following provisions that apply for Phase 3 engines (as noted in the proposed regulatory text for Appendix I of part 1054):

- The useful life and corresponding deterioration factors.
- Evaporative emission standards.
- Altitude adjustments.
- Warranty assurance provisions in § 1054.120(f).
- Emission-related installation instructions.
- Bonding.

C. Certification Fees (40 CFR Part 1027)

EPA is making several minor changes in 40 CFR part 1027 to update the procedures and align the instructions with current practices. None of these changes involve change or reconsideration of fee policies. We are proposing the following changes:

- Correcting the name of the compliance program.
- Replacing the schedule of fees from 2005 with the fees that apply for applications submitted in 2020.
- Revising the timeline for announcing adjusted fees for the upcoming year from a January 31 deadline to a March 31 deadline. This will allow for a more orderly process of calculating the new fees using the information from the previous year.
- Correcting the equation for non-evaporative certificates to no longer apply the inflation adjustment to operating costs. This corrects a publishing error that mistakenly introduced parentheses in the equation.
- Correcting the internet address for the consumer price index used for inflation adjustments.
- Removing the sample calculation for determining fees for 2006.
- Revising submission and payment instructions to refer only to electronic forms and transactions through *www.Pay.gov.*
- Clarifying that deficient filings must be resolved before the end of the model year, and that the time limit for requesting refunds applies equally to deficient filings.

D. Additional Amendments for Motor Vehicles and Motor Vehicle Engines (40 CFR Parts 85 and 86)

Motor vehicles and motor vehicle engines are subject to emission standards and certification requirements under 40 CFR part 86. This applies for light-duty vehicles, light-duty trucks, heavy-duty vehicles and engines, and highway motorcycles. There are additional compliance provisions in 40 CFR part 85. We are proposing the following amendments to these provisions:

- *Part 85:* We are amending the provisions for importation, exemptions, and model year to clarify that they no longer apply for heavy-duty engines. Those engines are already subject to analogous provisions under 40 CFR part 1068. While the two sets of provisions are largely the same, we want to avoid the ambiguity of having overlapping requirements. One aspect of this migration involves discontinuing the provisions that apply for Independent Commercial Importers for heavy-duty engines. No one has used these provisions for several years, and we have no reason to believe anyone will start to use these provisions.
- *Part 85:* We are making several minor corrections to (1) refer to provisions in 40 CFR part 1068 related to confidential business information and hearing procedures, and (2) clarify organization names and addresses for submitting information.
- *Part 85, Subpart O:* This subpart set emission standards for 1993 and older model year urban buses undergoing engine rebuilding. We have confirmed with the American Public Transportation Association that there are very few such urban buses still operating, and that none of them will have engine rebuilds. We are therefore proposing to remove this content from the CFR.
- *§ 85.1902(b)(2):* We are clarifying that defect-reporting requirements under paragraph (b)(2) apply for defects related to noncompliance with greenhouse gas emission standards, not criteria emission standards. This corrects an earlier amendment that inadvertently described the provisions as applying to noncompliance with any kind of emission standard. Defects related to criteria emission standards are covered by § 85.1902(b)(1).
- *§§ 86.113–04, 86.213, and 86.513:* Adding optional reference procedures for measuring aromatic and olefin content of E0 gasoline test fuel. These changes align with the reference procedures for EPA's Tier 3 E10 gasoline test fuel at 40 CFR 1065.710(b). These changes are needed because material limitations prevent laboratories from using the procedures in ASTM D1319. This change also applies for the E0 gasoline test fuel specified in 40 CFR 1065.710(c),
- *§ 86.129–00:* Revising the description of test weight basis to be loaded vehicle weight for all light-duty vehicles and light-duty trucks. This is a correction to align the regulation with current practice.
- *§ 86.130–96:* We are correcting the reference to a testing flowchart that was moved to 40 CFR 1066.801.
- *§§ 86.401–97 and 86.413–78:* We are removing obsolete sections to prevent confusion.
- *§§ 86.419–2006 and 86.427–78:* We are revising the table with service accumulation parameters to clarify how to perform testing separately for Class I–A and Class I–B, rather than treating them as a single class.
- *§§ 86.435–78 and 86.436–78:* We are correcting references to the regulation to clarify that a motorcycle is compliant if measured test results are *at* or below the standards.
- *§ 86.531–78:* We are adding instruction to seal exhaust system leaks as needed before testing highway motorcycles. The proposed amendment also applies for testing off-highway motorcycles and all-terrain vehicles under 40 CFR part 1051. This same instruction also applies for light-duty vehicle testing under 40 CFR 1066.110(b)(1)(vi).
- *Part 86, Subpart P:* The idle test procedures for spark-ignition engine and vehicles are no longer needed for certification or other compliance demonstrations. We are therefore

proposing to remove this content from the CFR.

• *Part 86, Subpart Q:* Engine technology has advanced to include internal feedback controls and compensation to allow for operation at a wide range of altitudes. The certification requirements related to altitude adjustments are therefore mostly or completely obsolete. We are proposing a simplified version of the altitude provisions for highway motorcycles at 40 CFR 86.408–78(c) and (d) in case there are some very small motorcycles that require adjustment for altitude. We request comment on the need for these proposed provisions.

• *§ 86.1803:* We are revising the definition for heavy-duty vehicle, with a conforming revision to the definition for light-duty truck, to clarify that the sole regulatory criterion for whether a complete vehicle is a heavy-duty vehicle for purposes of the regulation is whether its gross vehicle weight rating is above 8,500 pounds. The current approach remains unchanged for incomplete vehicles; that is, heavy-duty vehicles also include incomplete vehicles even if their gross vehicle weight rating is at or below 8,500 pounds, if their curb weight is above 6,000 pounds or if their basic vehicle frontal area is greater than 45 square feet. The proposed revisions are intended to (1) prevent light-duty trucks from becoming heavy-duty vehicles in a configuration involving a hybrid powertrain due to the extra weight related to energy storage and (2) avoid an incentive for manufacturers to add vehicle weight or frontal area simply to avoid the standards that apply for light-duty vehicles. In these cases under the current definition, the curb weight or frontal area would artificially increase to the point that the vehicle would qualify as a heavy-duty vehicle, even though it otherwise has the characteristics of a light-duty truck. This same change is not necessary for incomplete vehicles because certifying manufacturers have the option to select the appropriate vehicle classification for those vehicles. Note that the proposed change applies only for future certification; any certified heavy-duty vehicle that would no longer fit the description will not be affected by the amended definition.

• *§ 86.1810:* We are clarifying the certification responsibilities for cases involving secondary vehicle manufacturers that modify a certified vehicle and recertify the modified vehicle to the standards that apply for a new vehicle under 40 CFR part 86, subpart S. Since the original certifying manufacturer accounts for these vehicles in their fleet average calculations for criteria exhaust emissions and evaporative emissions, we believe these secondary vehicle manufacturers should not be required to repeat those fleet average calculations for the affected vehicles. This would depend on the secondary vehicle manufacturer meeting all the same bin standards and family emission limits as specified by the original certifying manufacturer.

• *§ 86.1811–17:* The **Federal Register** mistakenly published a reference to the Tier 3 p.m. standard. Since we intended for the standard to apply at all times, we are amending the regulation to properly refer to that as the Tier 3 p.m. standard.

• *§ 86.1813–01:* We are clarifying that electric vehicles and fuel cell vehicles are not subject to evaporative and refueling emission standards. The preamble to the final rule adopting the light-duty Tier 3 standards stated that these emission standards apply only for volatile fuels, but we did not include a clear statement excluding electric vehicles and fuel cell vehicles in the regulations (79 FR 23514, April 28, 2014).

• *§ 86.1818–12:* We are clarifying that manufacturers calculate the in-use CO_2 standard using the appropriate test result for carbon-related exhaust emissions after adjustment with the deterioration factor to account for durability effects. In many cases, the deterioration factor is 0 (additive) or 1 (multiplicative), in which case the deterioration factor does not change the calculated in-use CO_2 standard.

• *§ 86.1838–01:* We are restoring text that was inadvertently removed in an earlier amendment. The restored text specifies which mileage provisions from § 86.1845 do not apply for small-volume manufacturers doing in-use verification testing.

• *§ 86.1868:* We are adopting detailed provisions describing how reduced air conditioning test requirements apply for electric vehicles and plug-in hybrid electric vehicles. These provisions are consistent with current practice described in EPA guidance. We are also proposing to specify that plug-in hybrid electric vehicles qualify for relief from AC17 testing, like electric vehicles, if they have an adjusted all electric range of 60 miles or more and they do not need engine power for cabin cooling during vehicle operation represented by the AC17 procedure. This is intended to include vehicles for which an owner can typically expect to avoid using the engine for daily commuting, including commutes on a hot summer day. Finally, we are proposing to clarify that manufacturers do not need to make a demonstration to qualify for air conditioning efficiency credits for pure electric vehicles or for plug-in hybrid electric vehicles, provided that those vehicles qualify for waived AC17 testing as described above. This is due to the complexity of quantifying credit quantities in grams CO_2 per mile for driving without engine power. We are also proposing to specify that AC17 testing with plug-in hybrid electric vehicles, if required, always be done in charge-sustaining mode to avoid the confounding effect of intermittent engine operation during the test.

Highway motorcycles are currently subject to emission standards based on emission measurements using the same duty cycle that applies for cars and trucks. The World Forum for Harmonisation of Vehicle Regulations (known as WP.29) adopted the World Motorcycle Test Cycle (WMTC) with the intent of establishing a single, harmonized test cycle that could be used for meeting emission standards in all countries. All European countries, along with some additional countries in Asia and South America, have adopted the WMTC. California ARB may also pursue regulation to adopt WMTC as part of its emission control program for highway motorcycles. We request comment on adopting the WMTC as a means of certifying highway motorcycles to EPA emission standards. We also request comment on any appropriate adjustment to the exhaust emission standards that apply for highway motorcycles to ensure equivalent stringency for testing with the WMTC.

E. Additional Amendments for Locomotives (40 CFR Part 1033)

EPA is updating 40 CFR part 1033 to remove references to specific content in 40 CFR part 92, as described in Section III.B.2. In addition, we are proposing the following minor corrections and changes:

• *§ 1033.150:* Remove the interim provisions that no longer apply. This leaves paragraph (e) as the only remaining paragraph in this section.

• *§ 1033.225:* Clarify that amending an application for certification applies prospectively. In particular, amending an application does not apply for actions taken previously.

• *§ 1033.255:* Clarify that doing anything to make information false or incomplete after submitting an application for certification is the same as submitting false or incomplete information. For example, if there is a change to any corporate information or engine parameters described in the manufacturer's application for

certification, the manufacturer must amend the application to include the new information.

• *§ 1033.255:* Clarify that voiding certificates for a failure to comply with recordkeeping or reporting requirements will be limited to the certificates that relate to the particular recordkeeping or reporting failure.

• *§ 1033.601:* Correct references to specific provisions in 40 CFR part 1068.

• *§ 1033.701:* Correct a paragraph reference.

• *§ 1033.740:* Remove the reference to emission credits from part 92. There is no need for this, since the records related to credit accounting do not identify credits as being from part 92 or part 1033. Any credits generated under part 92 will continue to be available for certifying locomotives under part 1033.

• *§ 1033.901:* Name the date, January 1, 2000, that marked the start of the original locomotive emission standards, rather than describing the date with reference to publication of the original final rule and its effective date (18978 FR 63, April 16, 1998).

• *§ 1033.925:* Removing text in paragraph (e) that is already in paragraph (b) of the same section.

F. Additional Amendments for Land-Based Nonroad Diesel Engines (40 CFR Part 1039)

EPA's emission standards and certification requirements for land-based nonroad compression-ignition (CI) engines are identified in 40 CFR part 1039. We refer to these as Nonroad CI engines. Several changes to 40 CFR part 1039 that apply broadly are described above. Specifically, Section III.B.2 describes how we are removing regulatory content related to the Tier 1, Tier 2, and Tier 3 standards originally adopted in 40 CFR part 89. We are accordingly amending 40 CFR part 1039 to remove references to 40 CFR part 89 that no longer apply.

This section describes additional proposed amendments for EPA's Nonroad CI program:

• *§ 1039.20:* Remove the option to use a branded name instead of the engine manufacturer's corporate name for uncertified stationary engines. Since these engines are not certified, there is no way for EPA to document any relationship between the engine manufacturer and the branded company. We also are not aware of anyone using this provision.

• *§ 1039.20:* Revise the label statement for stationary engines covered by § 1039.20 to avoid references to specific parts of the CFR. This is intended to prevent confusion. We can approve continued use of labels with the older previous statement under the provisions of § 1039.135(f). This may be needed, for example, if manufacturers have remaining labels in their inventory.

• *§ 1039.101:* Add a table entry to clarify how standards apply for engines with maximum engine power above 560 kW. The current rendering in the Code of Federal Regulations can be misleading.

• *§ 1039.102:* Correct the heading of Table 6 to include engines at *or below* 560 kW. The table was published in a way that inadvertently excluded 560 kW engines.

• *§ 1039.135:* Discontinue the equipment labeling requirement to state that engines must be refueled with ultra low-sulfur diesel fuel (ULSD). Since in-use diesel fuel for these engines must universally meet ULSD requirements, there is no longer a benefit to including this label information.

• *§ 1039.205:* Add text to clarify how engine manufacturers should identify information in the application for certification related to engine diagnostic systems.

• *§ 1039.225:* Clarify that amending an application for certification applies prospectively. In particular, amending an application does not apply for actions taken previously.

• *§ 1039.255:* Clarify that doing anything to make information false or incomplete after submitting an application for certification is the same as submitting false or incomplete information. For example, if there is a change to any corporate information or engine parameters described in the manufacturer's application for certification, the manufacturer must amend the application to include the new information.

• *§ 1039.255:* Clarify that voiding certificates for a failure to comply with recordkeeping or reporting requirements will be limited to the certificates that relate to the particular recordkeeping or reporting failure.

• *§ 1039.740:* Remove the reference to emission credits from part 89. There is no need for this since the records related to credit accounting do not identify credits as being from part 89 or part 1039.

• *§ 1039.801:* Revise the definition of ''low-hour'' to state that engines at or below 560 kW should qualify as ''low-hour'' only up to 125 hours, rather than 300 hours. This is intended to ensure that engine's tested to establish the low-hour emission result for an engine family are properly represented as new engines that have not started to experience deterioration of emission controls. This does not preclude continued testing beyond 125 hours, but it would prevent manufacturers from planning test programs that extend well beyond 125 hours. This change aligns with the provisions that already apply for marine diesel engines under 40 CFR part 1042. We request comment on instead specifying the 125-hour threshold only for engines not expected to use NO_X aftertreatment; this would cover engines up to 56 kW under 40 CFR part 1039, and engines up to 600 kW under 40 CFR part 1042.

• *§ 1039.801:* Revise the definition of ''small-volume engine manufacturer'' to remove the requirement to have certified engines in the United States before 2003. This limitation was related to the transition to meeting the Tier 4 standards. Now that those phase-in provisions have expired, the remaining provisions relate to reporting CH_4 and N_2O emissions and using assigned deterioration factors. We believe these provisions can reasonably be applied to start-up small businesses meeting the Tier 4 standards.

Finally, in addition to the proposed amendments to 40 CFR part 1039 discussed above, we are requesting comment on the production limits for the alternate FEL provision in 40 CFR 1039.101(d)(2). In particular, we request comment on whether the NO_X FEL cap should be increased.

G. Additional Amendments for Marine Diesel Engines (40 CFR Parts 1042 and 1043)

EPA's emission standards and certification requirements for marine diesel engines under the Clean Air Act are set out in 40 CFR part 1042. Emission standards and related fuel requirements that apply internationally are set out in 40 CFR part 1043.

Several proposed changes to 40 CFR part 1042 that apply more broadly are described above. Specifically, Section III.B.2 describes how we are proposing to remove regulatory content related to the Tier 1 and Tier 2 standards originally adopted in 40 CFR part 94. We are accordingly proposing to amend 40 CFR part 1042 to remove references to 40 CFR part 94 that no longer apply.

This section describes additional proposed amendments for our marine diesel engine program.

1. Marine Replacement Engine Exemption

We are proposing several adjustments to the replacement engine exemption in § 1042.615. First, we are clarifying the regulatory determination that applies for cases involving new replacement engines that are normally subject to Tier 4 standards. In the 2008 final rule to

adopt the Tier 4 standards, we finalized a determination ''that Tier 4 engines equipped with aftertreatment technology to control either NO_X or PM are not required for use as replacement engines for engines from previous tiers in accordance with this regulatory replacement engine provision.'' The preamble to that final rule made it clear that the determination was limited to ''Tier 4 marine diesel replacement engines that comply with the Tier 4 standards through the use of catalytic aftertreatment systems.'' (73 FR 37157) However, that limitation was not copied into the regulatory text. Recent events, including the certification of some engines to Tier 4 standards without aftertreatment, make it necessary to revise this replacement engine regulation to clarify that EPA originally intended for the determination to apply only in cases where the Tier 4 engine relies on aftertreatment technology, as indicated in the 2008 final rule. The rule also stated that ''[s]hould an engine manufacturer develop a Tier 4 compliant engine solution that does not require the use of such technology, then this automatic determination will not apply.''

Second, we propose to modify the requirement that engine manufacturers notify EPA after shipping exempt replacement engines. § 1042.615(a) requires an engine manufacturer to send EPA notification 30 days after shipping an exempt engine to demonstrate that the selected engine was the cleanest available for the given installation. We indicated that ''[t]hese records will be used by EPA to evaluate whether engine manufacturers are properly making the feasibility determination and applying the replacement engine provisions.'' We also indicated that we expected engine manufacturers to examine ''not just engine dimensions and weight but other pertinent vessel characteristics such as drive shafts, reduction gears, cooling systems, exhaust and ventilation systems, and propeller shafts; electrical systems; . . . and such other ancillary systems and vessel equipment that would affect the choice of an engine.'' While engine manufacturers have submitted these reports, the information provided has not supported our original objective. Specifically, the reports vary widely in information provided but at the same time are too case-specific. Therefore, we are proposing to require manufacturers to submit a single annual report that is due at the same time as the general requirement for reporting on replacement engines under 40 CFR 1068.240. The annual report would include the information described in our 2008 rule for all the affected engines and vessels. This change would provide a predictable schedule for EPA to review the submitted information. This would also allow EPA to standardize the format and substance of the reported information. Manufacturers would benefit from submitting a consistent set of information in an annual submission for all their replacement engine information.

Third, we are proposing to revise the regulatory instructions for submitting replacement engine reports under § 1042.615. The number of exempt replacement engines would be limited to those that are shipped to boat owners or designated for a specific vessel. Engine manufacturers may produce and ship exempt replacement engines (with per-cylinder displacement up to 7 liters) without making the specified demonstrations, as allowed under 40 CFR 1068.240(c), but manufacturers may produce only a limited number of those ''untracked'' engines in a given year. Those untracked replacement engines are covered by the reporting requirements that apply under § 1068.240 since the tracked exemption under § 1042.615 and § 1068.240(b) does not allow for shipping engines to distributors without identifying a specific installation and making the necessary demonstrations for that installation. We are proposing to take a streamlined approach for Tier 3 engines since the demonstration for those engines consists of affirming EPA's regulatory determination that no suitable Tier 4 engines (without aftertreatment) are available for replacement. We do not expect engines with per-cylinder engine displacement below 7 liters to be able to meet Tier 4 standards without aftertreatment devices. As a result, Tier 3 replacement engines are limited only in that they may not be used to replace engines that were certified to Tier 4 standards. In this early stage of implementing Tier 4 standards, we expect it to be several years before Tier 4 engines need replacement. On the other hand, the gradual turnover of the fleet will make Tier 4 replacements more common, which may in turn decrease the demand for Tier 3 replacement engines. We request comment on applying this streamlined approach for Tier 3 replacement engines only through 2025 to reflect this expected development.

Finally, we propose to clarify that the determination related to Tier 4 replacement engines applies differently for engines that become new based on vessel modifications. Under the definition of ''new vessel'' in § 1042.901, modification of an existing vessel may cause the vessel to become ''new'' if the vessel modifications cause the vessel's assessed value to at least double. In this case, all engines installed on the vessel are subject to standards for the model year based on the date of vessel modifications. Since the effective dates of the Tier 4 standards, we have learned that there may be circumstances in which vessel modifications may be substantial enough to qualify a vessel as ''new,'' but the installation of new Tier 4 engines may not be practical or feasible without cost-prohibitive additional vessel modifications. For example, a vessel owner may want to make a substantial upgrade to an older vessel, including engine replacement with a much lower-emitting engine. If the upgrade doubles the assessed value of the vessel, this would trigger a need for all installed or replacement engines above 600 kW to be certified to Tier 4 standards. We have learned that such a project may become cost-prohibitive based on the additional vessel modifications needed to accommodate the Tier 4 engine, which could cause the vessel to continue operating in the higher-emitting configuration. To address this scenario, we are proposing to allow the replacement engine exemption for certain vessels that become new because of modifications, subject to a set of conditions. Specifically, the exemption would apply only with EPA's advance approval based on a demonstration that the installation of a Tier 4 engine would require significant vessel redesign that is infeasible or impractical. EPA's assessment may account for the extent of the modifications already planned for the project. EPA may approve installation of Tier 3 engines instead of Tier 4 engines for qualifying vessels. Recreational engines and commercial engines below 600 kW are not subject to Tier 4 standards. As a result, if a vessel becomes new through modification, it should be reasonable to expect such new engines to be certified to Tier 3 standards rather than being eligible for the replacement engine exemption.

Vessel modifications may also involve Category 3 engines, which are subject to Tier 3 standards. Because these engines and vessels are so large, we believe the exemption provisions described above for vessels that become new as a result of modifications are not needed to accommodate Tier 2 standards instead of Tier 3 standards. However, we request comment on applying the exemption provisions for this circumstance as described above for Category 1 and Category 2 engines.

We request comment on all aspects of the proposed amendments to the

replacement engine exemption for marine diesel engines.

2. Provisions Related to On-Off Controls for Marine Engines

EPA adopted the current set of emissions standards for Category 3 marine diesel engines in 2010 (75 FR 22932; April 30, 2010). The Tier 3 standards include provisions allowing engine manufacturers to design their engines with control systems that allow an engine to meet the Tier 3 standards while operating in U.S. waters, including the North American Emission Control Area and the U.S. Caribbean Sea Emission Control Area (ECAs), and the less stringent Tier 2 standards while operating outside of U.S. waters. We refer to this design strategy as ''on-off control.'' These provisions reflect the geographic nature of the NO_X engine standards contained in Regulation 13, MARPOL Annex VI.

Engine manufacturers have raised questions about the meaning of the regulatory provision at § 1042.101 that requires Category 3 engines to ''comply fully with the Tier 2 standards when the Tier 3 emission controls are disabled.'' This was intended to incorporate the ''on-off controls'' allowed under MARPOL Annex VI for the IMO Tier III NO_X limits. The HC and CO standards for Category 3 engines apply equally for EPA's Tier 2 and Tier 3 standards adopted under the Clean Air Act, so there should be no question that those standards apply even if NO_X controls are disabled. While 40 CFR 1042.104 includes a PM requirement, it is a reporting requirement only. The only other ''standard'' for Category 3 engines in 40 CFR part 1042 is the requirement related to mode caps in § 1042.104(c). The mode caps serve as separate emission standards for each test point in the duty cycle used for certifying the engines. The 2010 final rule describes how the mode caps are necessary for proper implementation of the Tier 3 standards for SCR-equipped engines (75 FR 22932). Since Category 3 engines with SCR systems would generally comply with the Tier 2 NO_X standard in the ''disabled'' configuration without SCR, we believe there would be no benefit to applying the mode caps as a part of the Tier 2 configuration for these Tier 3 engines with on-off controls. We are therefore proposing to clarify that the mode caps are associated only with the Tier 3 NO_X standards. This approach is consistent with the on-off control provisions adopted under MARPOL Annex VI.

The regulation also allows for on-off controls for NO_X for auxiliary engines used on vessels powered by Category 3 engines. More broadly, § 1402.650(d) allows those engines to be certified to MARPOL Annex VI standards instead of being certified to EPA's emission standards under 40 CFR part 1042. The regulation as originally written describes how these engines must comply with EPA's Tier 3 and Tier 4 standards in the same way that Category 3 engines must comply with EPA's Tier 2 and Tier 3 standards. However, since auxiliary engines installed on Category 3 vessels are certified to MARPOL Annex VI standards instead of EPA's emission standards, the regulation should describe how these auxiliary engines must meet the IMO Tier II and IMO Tier III NO_X standards to comply with the on-off control provisions under § 1042.115(g). These requirements related to the EIAPP certificates for engines with on-off controls are addressed under MARPOL Annex VI and 40 CFR part 1043.

3. Miscellaneous Marine Diesel Amendments

EPA is proposing to make several additional changes across 40 CFR part 1042 to correct errors, to add clarification, and to make adjustments based on lessons learned from implementing these regulatory provisions. Specifically, EPA is proposing the following:

- *§ 1042.101:* Revise the instruction for specifying a longer useful life. The regulation as originally adopted states that engine design, advertising, and marketing may equally serve as the basis for establishing a longer useful life. We would not expect manufacturers to specify a longer useful life based only on advertising and marketing claims. The proposed amendment emphasizes that design life is the basis for specifying a longer useful life, with the further explanation that the recommended overhaul interval can be understood, together with advertising and marketing materials and other relevant factors, to properly represent an engine's design life.
- *§ 1042.101:* The **Federal Register** mistakenly published references to Tier 3 PM standards and Tier 4 PM standards. Since we intended for those standards to apply at all times, we are amending the regulation to properly refer to those as Tier 3 PM standards and Tier 4 PM standards.
- *§ 1042.115:* Revise the provision related to on-off controls to clarify that we have designated NO_X Emission Control Areas (ECAs) for U.S. waters. We no longer need to reference a possible future ECA. We propose to use the U.S. ECA boundaries to establish the area in which engines with on-off controls for aftertreatment-based standards need to be fully operational.
- *§ 1042.125:* Add maintenance requirements for fuel-water separator cartridges or elements as an additional example of maintenance that is not emission-related. This aligns with the maintenance specifications for land-based nonroad diesel engines in 40 CFR part 1039.
- *§ 1042.135:* Revise the labeling instruction for engines installed in domestic-only vessels to clarify that it applies only for engines above 130 kW, and that it applies equally for commercial and recreational vessels. These changes both align the EPA regulations to more closely align with the international standards under MARPOL Annex VI.
- *§ 1042.145:* Add a provision allowing more flexible marine installation of engines meeting standards for land-based nonroad manufacturers. The regulation as originally drafted allows manufacturers to install certified land-based nonroad engines in marine vessels. This is straightforward for recreational engines and for engines at or above 600 kW because the emission standards from the two programs are nearly identical. Commercial marine engines below 600 kW are subject to Tier 3 standards, while the comparable land-based nonroad engines are subject to more stringent Tier 4 standards. This makes the intended flexibility provision impractical for these engines. We are proposing to address that by allowing manufacturers to use the flexibility for land-based nonroad engines that were certified to the Tier 3 emission standards in an earlier model year. Note that land-based nonroad engines below 37 kW and above 560 kW were never subject to Tier 3 emission standards, so this proposed provision would not apply to them. Those land-based nonroad engines were subject to Tier 2 standards, which are substantially less stringent than the marine Tier 3 standards for NO_X + HC or PM (or both). The detailed compliance provisions for these engines are described in 40 CFR 1068.265.
- *§ 1042.225:* Clarify that amending an application for certification applies prospectively. In particular, amending an application does not apply for actions taken previously.
- *§ 1042.255:* Clarify that doing anything to make information false or incomplete after submitting an application for certification is the same as submitting false or incomplete information. For example, if there is a change to any corporate information or engine parameters described in the

manufacturer's application for certification, the manufacturer must amend the application to include the new information.

• *§ 1042.255:* Clarify that voiding certificates for a failure to comply with recordkeeping or reporting requirements will be limited to the certificates that relate to the particular recordkeeping or reporting failure.

• *§ 1042.302:* For emission testing during sea trials for Category 3 engines with on-off controls, allow manufacturers the flexibility to omit testing in Tier 2 mode if they do not need aftertreatment to meet the Tier 2 standards. We are most interested in compliance with the Tier 3 standards, since those controls are active anytime vessels are operating within ECA boundaries. System design and calibration with aftertreatment involves greater uncertainty than engines that comply using only in-cylinder controls. As a result, we believe the compliance demonstration for Tier 2 mode adds value only if it involves aftertreatment.

• *§ 1042.650:* Revise the introductory text to clarify that paragraphs (a) through (c) continue to apply only for Category 1 and Category 2 engines, and that the provisions related to auxiliary engines on Category 3 vessels in paragraph (d) apply equally for Category 3 auxiliary engines. By adding paragraph (d) with limitation described in the section's introductory text, we inadvertently excluded Category 3 auxiliary engines.

• *§ 1042.655:* Clarify that measuring engine-out emissions for engines that use exhaust aftertreatment must account for the backpressure and other effects associated with the aftertreatment devices. While improving the alignment between measured results and modeled results, this change also has the effect of removing the expectation that engine-out (pre-catalyst) emissions must meet Tier 2 standards; this is intended to address the case in which an engine may meet the Tier 2 standards with a different SCR dosing strategy rather than by completely disabling the SCR system.

• *§ 1042.701:* Remove the reference to emission credits from part 94. This reference is not needed since the records related to credit accounting do not identify credits as being from part 94 or part 1042.

• *§ 1042.801:* Remove the requirement to register fuels used to certify remanufacturing systems. EPA does not register fuels such as natural gas or liquefied petroleum gas, so it is not appropriate to impose such a registration requirement. The requirement continues to apply for remanufacturing systems that are based on diesel fuel additives.

• *§ 1043.41:* Clarify that engine manufacturers may continue to produce new engines under an established EIAPP certificate after a change in emission standards for purposes other than installation in a new vessel. For example, manufacturers may need to produce engines certified to IMO Tier II NO_X standards after 2016 for installation as replacement engines in vessels built before 2016.

• *§ 1042.910 and § 1043.100:* Incorporate by reference the 2017 edition of MARPOL Annex VI and the NOx Technical Code, dated 2017, which contains all amendments through 2016.

Engine manufacturers have been testing production engines as described in 40 CFR part 1042. This generally involves testing up to 1 percent of production engines for engine families with production volumes greater than 100 engines. We adopted these testing provisions with the expectation that most families would have production volumes greater than 100 engines per year. It turns out that there are a few families with production volumes substantially greater than 100 engines per year, but many families qualify as small-volume families that are not subject to production-line testing requirements. As a result, manufacturers test several engines in large engine families, but many engine families have no production-line testing at all.

The biggest benefit of production-line testing for this sector is to confirm that engine manufacturers can go beyond the prototype engine build for certification and move to building compliant engines in a production environment. From this perspective, the first test is of most value, with additional tests adding assurance of proper quality control procedures for ongoing production. We are considering whether to revise the production-line testing regimen for marine diesel engines to reflect this basic objective. Toward that end, we would consider amending the regulation to require no more than one test per family. An engine test from a prior year would count as a sufficient demonstration as long as the manufacturer certifies the engine family using carryover emission data. At the same time, we would remove the testing exemption for small businesses and small-volume engine families. We believe this would result in a more effective program with no increase in overall testing.

We have prepared a memorandum to spell out a possible approach for a revised production-line testing protocol.[21] We request comment on amending the production-line testing program to require broader testing at lower sampling rates.

H. Portable Fuel Containers (40 CFR Part 59)

EPA's emission standards and certification requirements for portable fuel containers are described in 40 CFR part 59. Section III.A describes a proposed amendment related to test fuel specifications. In addition, we are proposing the following amendments:

• *§ 59.626:* Correct the reference to additional testing to recognize that the manufacturer may need to test multiple containers.

• *§ 59.628:* Align recordkeeping specifications with the provisions that apply for nonroad engines and equipment. This removes the ambiguity from applying specifications differently for different types of testing information. As noted in Section III.J, now that test records are stored electronically, there is no reason to differentiate testing information into routine and non-routine records.

• *§ 59.650:* Revise the blending instruction to specify a lower level of precision; specifying a range of 10.0 ± 1.0 percent, which is consistent with the approach we take in 40 CFR 1060.515 and 1060.520.

• *§ 59.653:* Correct the pressure specification for durability testing. The amendment adjusts the kPa value to match the psi value in the regulation. This aligns with the pressure testing specified for nonroad fuel tanks.

• *§ 59.653:* Clarify that the fuel fill level needs to stay at 40 percent full throughout slosh testing. The container should be closed for the duration of the test, so this clarification is mainly intended to ensure that the fuel tank does not leak during the test.

• *§ 59.660:* Revise the test exemption to clarify that anyone subject to regulatory prohibitions may ask for a testing exemption.

• *§ 59.664:* Correct the web address for U.S. Department of Treasury Circular 570.

• *§ 59.680:* Clarify how the definition of ''portable fuel container'' applies for different colors. The regulatory text states that red, yellow, and blue utility jugs qualify as portable fuel containers regardless of any contrary labeling or marketing. This is intended to prevent circumvention of emission standards with containers that would be

[21] ''Alternative Production-Line Testing Requirements for Marine Diesel Engines,'' EPA memorandum from Alan Stout to Docket EPA–HQ–OAR–2019–0307, January 23, 2020.

commonly recognized as portable fuel containers. Containers that are not red, yellow, or blue qualify as fuel containers if they meet the criteria described in the definition. The amendment to clarify this point does not represent a change in policy. For example, anyone who sold uncertified purple portable fuel containers that were subject to standards may be in violation of the prohibitions in 40 CFR 59.602.

I. Evaporative Emission Standards for Nonroad Spark-Ignition Engines and Equipment (40 CFR Part 1060)

EPA adopted evaporative emission standards and test procedures in 40 CFR part 1060. Section III.A describes proposed amendments related to test fuel specifications. EPA is also proposing numerous changes across 40 CFR part 1060 to correct errors, to add clarification, and to make adjustments based on lessons learned from implementing these regulatory provisions. This includes the following changes:

- *§§ 1060.1 and 1060.801:* Clarify how standards apply for portable nonroad fuel tanks.
- *§§ 1060.30 and 1060.825:* Consolidate information-collection provisions into a single section.
- *§ 1060.104:* Clarify that any approval from California ARB is sufficient for demonstrating compliance with running loss standards, rather than limiting this to approved Executive Orders.
- *§ 1060.105:* Clarify the requirement for tanks to be sealed to recognize the exception allowed under the regulation.
- *§§ 1060.105 and 1060.240:* Allow manufacturers more generally to exercise the alternative of using procedures adopted by California ARB. This is necessary to allow testing with the E10 test fuel adopted by California ARB after the 2004 version of its regulation that is currently referenced in the Code of Federal Regulations.
- *§ 1060.120:* Clarify that the emission-related warranty period starts on the date that the ultimate purchaser buys the certified product. We also don't want to prohibit manufacturers from including components in the warranty if they fail without increasing evaporative emissions. These changes align with similar amendments in our other programs.
- *§ 1060.130:* Clarify how manufacturers must identify limitations on the types of equipment covered by the application for certification, especially for fuel caps. We allow equipment manufacturers to certify their equipment using widely varying approaches for fuel caps. The equipment manufacturer's certification and testing method needs to be reflected in their instructions for anyone completing assembly of equipment from that equipment manufacturer.
- *§ 1060.135:* Clarify how the equipment labeling provisions apply for engine manufacturers, and clarify that manufacturers need to apply labels at the time of manufacture. In many cases, the labeling is integral to the production process, such as for molded fuel tanks.
- *§ 1060.135:* Allow for permanently identifying the date of manufacture somewhere other than the emission control information label using any method (not only stamping or engraving), and require that the manufacturer describe in the application for certification where the equipment identifies the date of manufacture.
- *§ 1060.135:* Simplify the equipment labeling options to align with the prevailing practice. The alternative approaches have been confusing for manufacturers, who have all selected the option of identifying family names rather than component codes.
- *§ 1060.137:* Clarify when and how to label fuel caps. This depends only on whether the fuel cap is certified, not on whether the fuel cap is mounted directly on the fuel tank. It is also important to include the part number on the fuel cap if the equipment is designed with a pressurized fuel tank.
- *§ 1060.205:* Replace the requirement to submit data from invalid tests with a requirement to simply notify EPA in the application for certification if a test was invalidated.
- *§ 1060.225:* Clarify that amending an application for certification applies prospectively. In particular, amending an application does not apply for actions taken previously.
- *§ 1060.225:* Clarify how manufacturers may amend the application for certification during and after the model year, consistent with the current policy regarding field fixes.
- *§ 1060.235:* Clarify that we can direct manufacturers to send test products to EPA for confirmatory testing, or to a different lab that we specify.
- *§ 1060.235:* Add an explicit allowance for carryover engine families to include the same kind of within-family running changes that are currently allowed over the course of a model year. The original text may have been understood to require that such running changes be made separate from certifying the engine family for the new model year.
- *§ 1060.250:* Remove references to routine and standard tests, and remove the shorter recordkeeping requirement for routine data (or data from routine tests). We are proposing that all test records must be kept for eight years. With electronic recording of test data, there should be no advantage to keeping the shorter recordkeeping requirement for a subset of test data. EPA also notes that the eight-year period restarts with certification for a new model year if the manufacturer uses carryover data.
- *§ 1060.255:* Clarify that doing anything to make information false or incomplete after submitting an application for certification is the same as submitting false or incomplete information. For example, if there is a change to any corporate information or parameters described in the manufacturer's application for certification, the manufacturer must amend the application to include the new information.
- *§ 1060.255:* Clarify that voiding certificates for a failure to comply with recordkeeping or reporting requirements will be limited to the certificates that relate to the particular recordkeeping or reporting failure.
- *§ 1060.505:* Revise the provision describing alternative test procedures to align with parallel text in 40 CFR 1065.10(c). It is important to note that approved alternative procedures increase flexibility for certifying manufacturers without limiting available methods for EPA testing.
- *§ 1060.520:* For slosh testing and for the preconditioning fuel soak, specify that the fuel fill level should not decrease during testing, other than what would occur from permeation and from any appropriate testing steps to perform durability tests during the preconditioning fuel soak. We also specify that leaking fuel tanks are never suitable for testing, even if there is a potential to repair the leak.
- *§ 1060.601:* Remove the reference to fuel caps since there is no need for a separate description about how the regulatory prohibitions apply for fuel caps. As noted in § 1061.1(c), fuel cap manufacturers that choose to certify their fuel caps under 40 CFR part 60 become subject to all the requirements associated with certification.
- *§ 1060.610:* Adopt provisions clarifying how manufacturers can ship products that are not yet certified if that is needed for completing assembly at multiple locations, including shipment between companies and shipment between two facilities from a single company. These provisions are analogous to the provisions that apply for engines in 40 CFR 1068.260.

• *§ 1060.640:* Migrate engine branding to 40 CFR 1068.45.

• *§ 1060.801:* Update the contact information for the Designated Compliance Officer.

• *§ 1060.801:* Revise the definition of ''model year'' to clarify that the calendar year relates to the time that engines are produced under a certificate of conformity.

• *§ 1060.801:* Revise the definition of ''placed into service'' to prevent circumvention that may result from a manufacturer or dealer using a piece of equipment in a way that could otherwise cause it to no longer be new and subject to the prohibitions of 40 CFR 1068.101.

• *§ 1060.81:* Correct the web address for the American Boat and Yacht Council.

• *§ 1060.815:* Migrate provisions related to confidential business information to 40 CFR part 1068.

J. Additional Amendments for Nonroad Spark-Ignition Engines at or Below 19 kW (40 CFR Part 1054)

EPA's emission standards and certification requirements for nonroad spark-ignition engines at or below 19 kW are described in 40 CFR part 1054. EPA is proposing numerous changes across 40 CFR part 1054 to correct errors, to add clarification, and to make adjustments based on lessons learned from implementing these regulatory provisions. This includes the following changes:

• *§ 1054.1:* Clarify that the provision allowing for voluntary certification under 40 CFR part 1054 for larger engines applies only for engines up to 30 kW and up to 1,000 cubic centimeters.

• *§ 1054.2:* Add a clarifying note to say that a person or other entity other than a conventional ''manufacturer'' may need to certify engines that become new after being placed into service (such as engines converted from highway or stationary use). This is intended to address an assumption that only conventional manufacturers can certify engines.

• *§§ 1054.30, 1054.730, and 1054.825:* Consolidate information-collection provisions into a single section.

• *§ 1054.120:* Clarify that extended-warranty requirements apply for the emission-related warranty only to the extent that warranties are actually provided to the consumer, rather than to any published warranties that are offered. The principles are that the emission-related warranty should not be less effective for emission-related items than for items that are not emission-related, and that the emission-related warranty for a given component should not be less effective than the basic mechanical warranty for that same component.

• *§ 1054.125:* Allow for special maintenance procedures that address low-use engines. For example, operators in certain circumstances may perform engine maintenance after a smaller number of hours than would otherwise apply.

• *§ 1054.130:* Remove references to ''nonroad'' equipment to accommodate regulations for stationary engines in 40 CFR part 60, subpart JJJJ, that rely on these same provisions.

• *§ 1054.135:* Allow for including optional label content only if this does not cause the manufacturer to omit other information based on limited availability of space on the label.

• *§ 1054.145:* Remove obsolete content. Most of the provisions in this section were needed only for the transition to the Phase 3 standards. We are also clarifying that the provision that allows for testing with California Phase 2 test fuel applies only through model year 2019. California ARB requires testing with its Phase 3 test fuel starting in model year 2020.

• *§ 1054.205:* Replace the requirement to submit data from invalid tests with a requirement to simply notify EPA in the application for certification if a test was invalidated.

• *§ 1054.205:* Specify that the application for certification needs to include estimated initial and final dates for producing engines for the model year, and an estimated date for the initial introduction into U.S. commerce. This information helps with managing information in the application, and overseeing testing and other compliance requirements. This amendment aligns with current practice.

• *§ 1054.225:* Clarify that amending an application for certification applies prospectively. In particular, amending an application does not apply for actions taken previously.

• *§ 1054.225:* Simplify the instruction on changing the Family Emission Limit during the model year to specify that the manufacturer must identify the date of the change based only on the month and year. This change aligns with current practice for amending applications for certification.

• *§ 1054.225:* Clarify how manufacturers may amend the application for certification during and after the model year, consistent with the current policy regarding field fixes.

• *§ 1054.235:* Clarify that air-fuel ratio and other adjustable parameters are part of the selection of a worst-case test configuration for emission-data engines. If an engine has rich and lean settings, the manufacturer should determine which is the worst-case setting for emission measurements to determine deterioration factors. In particular, it is not appropriate to combine results from different settings to calculate any kind of average or composite value. Service accumulation between emission measurements may include any representative combination of those settings.

• *§ 1054.235:* Add an explicit allowance for carryover engine families to include the same kind of within-family running changes that are currently allowed over the course of a model year. The original text may have been understood to require that such running changes be made separate from certifying the engine family for the new model year.

• *§ 1054.235:* Clarify how EPA will calibrate engines within normal production tolerances for things that are not adjustable parameters.

• *§§ 1054.235, 1054.240, 1054.245, 1054.601, and 1054.801:* Describe how to demonstrate compliance with dual-fuel and flexible-fuel engines. This generally involves testing with each separate fuel, or with a worst-case fuel blend.

• *§ 1054.240:* Clarify that each measurement from emission-data vehicles must meet emission standards.

• *§ 1054.245:* Clarify the basis for EPA approval for using deterioration factors from other engines. EPA approval depends on the manufacturer demonstrating that emission measurements reasonably represent in-use deterioration for the engine family being certified. This copies in regulatory text that already applies under other EPA programs.

• *§ 1054.245:* Copy in the values and formulas used for assigned deterioration factors for handheld and nonhandheld engines. This includes a minor correction to the equation from 40 CFR 90.104(g) and a new description about combining deterioration factors for HC and NO_X, but otherwise maintains the current policy and practice for these deterioration factors.

• *§ 1054.250:* Remove references to routine and standard tests, and remove the shorter recordkeeping requirement for routine data (or data from routine tests). We are proposing that all test records must be kept for eight years. With electronic recording of test data, there should be no advantage to keeping the shorter recordkeeping requirement for a subset of test data. EPA also notes that the eight-year period restarts with

certification for a new model year if the manufacturer uses carryover data.

• *§ 1054.255:* Clarify that doing anything to make information false or incomplete after submitting an application for certification is the same as submitting false or incomplete information. For example, if there is a change to any corporate information or engine parameters described in the manufacturer's application for certification, the manufacturer must amend the application to include the new information.

• *§ 1054.255:* Clarify that voiding certificates for a failure to comply with recordkeeping or reporting requirements will be limited to the certificates that relate to the particular recordkeeping or reporting failure .

• *§ 1054.301:* Clarify the process for requesting a small-volume exemption from production-line testing. This is better handled as preliminary approval under § 1054.210 rather than including it as part of the application for certification.

• *§ 1054.310:* Provide an example to illustrate how manufacturers may need to divide a year into four quarters if the production period is longer (or shorter) than 52 weeks.

• *§ 1054.315:* Clarify that results from repeat tests can be averaged together, provided that the engine is not modified during the test program. This applies for engine modifications to switch to a different engine configuration or to improve emission control for a given engine configuration.

• *§§ 1054.315 and 1054.320:* Clarify how to manage test results for engines that fail an emission standard. Manufacturers must use the PLT test result from a failing engine regardless of the disposition of the failing engine. Manufacturers report test results after modifying a failing engine to show that it can be covered by the certificate of conformity, but manufacturers may factor these test results into PLT calculations only if the manufacturer changes production processes for all further engines to match the adjustments made to the failing engine. In that case, the test results from the modified engine count as a new test engine for the PLT calculations, rather than replacing the results from the engine before modifications. These regulatory changes codify the practice we have already established by guidance.[22]

• *§ 1054.505:* Clarify the instructions for controlling torque at non-idle test modes, and for demonstrating compliance with cycle-validation criteria. The revised language more carefully describes the current practice for testing engines.

• *§ 1054.620:* Clarify that provisions apply for any kind of competition, not just racing.

• *§§ 1054.625 and 1054.626:* Remove obsolete text.

• *§ 1054.640:* Migrate engine branding provisions to § 1068.45.

• *§ 1054.690:* Correct the web address for U.S. Department of Treasury Circular 570, and clarify how an automatic suspension of a certificate of conformity applies for certain numbers of engines, and how U.S. Customs incorporates the bonding requirements into its entry procedures.

• *§ 1054.701:* Change terminology for counting engines from ''intended for sale in the United States'' to ''U.S.-direction production volume.'' This conforms to the usual approach for calculating emission credits for nonroad engines.

• *§ 1054.710:* Clarify that it is not permissible to show a proper balance of credits for a given model by using emission credits from a future model year.

• *§ 1054.730:* Clarify terminology for ABT reports.

• *§ 1054.740:* Remove obsolete content.

• *§ 1054.801:* Update the contact information for the Designated Compliance Officer.

• *§ 1054.801:* Remove the note from the definition of ''handheld'' describing which standards apply for various types of equipment. The note does not cover all the provisions that apply, which has led to more confusion than clarity.

• *§ 1054.801:* Revise the definition of ''model year'' to clarify that the calendar year relates to the time that engines are produced under a certificate of conformity.

• *§ 1054.801:* Revise the definition of ''new nonroad engine'' to clarify that imported engines become new based on the original date of manufacture, rather than the original model year. This clarification is necessary because 40 CFR 1068.360 requires redesignation of an imported engine's model year in certain circumstances.

• *§ 1054.801:* Revise the definition of ''placed into service'' to prevent circumvention that may result from a manufacturer or dealer using a piece of equipment in a way that could otherwise cause it to no longer be new and subject to the prohibitions of 40 CFR 1068.101.

• *§ 1054.801:* Revise the definition of ''small-volume equipment manufacturer'' to state that the volume limits apply for all calendar years, not just 2007 through 2009. We no longer use this definition for limiting the scope of transition or phase-in provisions. The provisions for reduced production-line testing, assigned deterioration factors, and reduced bonding burdens should apply without regard to the specific years identified in the original regulation adopting the Phase 3 standards.

• *§ 1054.815:* Migrate provisions related to confidential business information to 40 CFR part 1068.

K. Amendments for General Compliance Provisions (40 CFR part 1068)

We are proposing a minor change to the replacement engine exemption in § 1068.240 to clarify how manufacturers qualify exempted engines under the tracked option in § 1068.240(b). Engine manufacturers may produce any number of exempt replacement engines if they meet all the specified requirements and conditions. To account for the timing of making the necessary demonstrations, the regulation specifies that engines must be designated as either tracked or untracked by September 30 following each production year, which coincides with the reporting requirement to document the number of exempt replacement engines each manufacturer produces. The regulation as adopted specifies that manufacturers must meet ''all the requirements and conditions that apply under paragraph (b)* * * .''

Manufacturers have raised a question about how this applies for the prohibition in § 1068.240(b)(3) against returning the old engine into U.S. commerce unless the engine is covered by a certificate or an exemption, as if the engine were new. We note that § 1068.32(a)(3) describes how regulatory terminology treats prohibitions and requirements as different types of provisions. As a result, we are proposing to modify the regulation to clarify that the requirements and conditions manufacturers must meet by September 30 to qualify under the tracked option are those ''requirements and conditions'' specified in § 1068.240(b)(2). The provisions of § 1068.240(b)(3) related to the disposition of the old engine continue to apply, but those provisions are not subject to the September 30 deadline.

Note that marine diesel engines are subject to § 1042.615 instead of the requirements and conditions of § 1068.240(b)(2). As a result, manufacturers qualify marine diesel engines under the tracked option by meeting the analogous requirements and conditions specified in § 1042.615(a)(2)

[22] ''Production Line Testing (PLT) Report Clarification'', EPA guidance document CD–15–21, August 31, 2015.

by September 30 following each production year.

Manufacturers have additionally expressed concerns about complying with the limit of producing only 0.5 percent of their production volume for specified sizes and types of engines under the untracked option. The challenge in part comes from complying with the limit as a percentage, since the allowed number of untracked replacement engines is unknown until the manufacturer establishes its total production volume for the year. In addition, untracked replacement engines are generally supplied to distributors in anticipation of engine failures, which might occur at very irregular intervals. We request comment on adjusting the terms of the untracked option for exempt replacement engines. Such an adjustment could take the form of (1) a greater percentage (perhaps only for large-displacement engines with low production volumes), (2) revised groupings for different sizes and types of engines, or (3) demonstrating compliance with the production limit over a multi-year period. Any comments supporting amended provisions should specify any recommended changes in detail and justify the need for those changes. Comments should also address concerns that any broadening of the terms of the exemption could have substantial air quality impacts by delaying the anticipated transition to engines meeting current standards.

We are also proposing to add a definition for ''element of design.'' We use this expression to define terms such as ''auxiliary emission control device,'' ''emission control system,'' and ''adjustable parameters.'' The proposed definition is based on earlier versions of the definition for the same term in other programs.

We request comment on the administrative requirements associated with testing exemptions pursuant to 40 CFR 1068.210. In particular, we request comment on whether or not to revise the two-year period specified for the exemption. Should we allow for longer durations without requiring another request?

L. Other Requests for Comment

EPA welcomes comments on the need for other technical corrections and clarifications. Readers are reminded to review public comments placed in the docket, which may contain requests for other corrections and clarifications. In addition, we request comment on the following broadly applicable topics.

1. End-of-Year Reports

Averaging, banking, and trading (ABT) of emission credits is addressed separately in individual standard-setting parts. The standard-setting parts generally require manufacturers using ABT to submit two reports: an ''end-of-year'' report due 90 days after the end of the model year, and a ''final report'' due 270 days after the end of the model year. EPA uses this approach because we need to determine compliance as close to the end of the model year as possible, but manufacturers are often unable to verify their information within the 90 days, so they need additional time before submitting their final reports. We request comment on potential revisions to this approach such as:

- Eliminating the 90-day report for manufacturers who have established a history of full compliance with the applicable ABT regulations.
- Replacing the two-report approach with a single 180-day report.

We recognize that different approaches may be appropriate for different industries; thus, commenters are encouraged to consider revisions separately by sector. Commenters supporting reducing the reporting requirements are also encouraged to include estimates of potential cost savings.

2. Other Data Reporting

We request comment on the potential for further streamlining data reporting requirements. For example:

- Do the regulations include redundant reporting requirements?
- Have certain older reporting requirements ceased to be of value?

3. Engines Used in Hazardous Locations

Manufacturers of diesel engines and equipment are sometimes subject to other federal regulations in addition to EPA emission standards. Diesel engine manufacturers have shared with EPA information regarding requirements from the Occupational Safety and Health Administration and the U.S. Coast Guard regarding regulations for engines operating in hazardous locations. The diesel engine industry has requested that EPA modify the EPA emission regulations to exempt engines used in hazardous locations from the EPA Tier 4 emission standards for nonroad land-based diesel engines and the EPA Tier 4 marine diesel standards, so that such engines are subject to the less stringent EPA Tier 3 emission standards for these categories of diesel engines. They have indicated that EPA should consider this change because they believe that it would be cost-prohibitive for them to qualify diesel engines meeting EPA's Tier 4 standards to these other rules. The concern applies for engines and equipment operating in Class I hazardous locations as identified in 29 CFR part 1910 or 46 CFR part 111. These hazardous locations generally include land-based and marine oil-extraction facilities and paper manufacturing facilities. These regulations require that manufacturers modify engines and equipment, for example, by limiting maximum surface temperatures to 200 °C or less.

EPA does not have sufficient information to evaluate this request at this time. Therefore, we request that commenters with relevant information address the following aspects of this issue:

- Information on the annual production of new engines and equipment that have been sold in the past several years that are designed to be used in Class I hazardous locations, and any projections regarding future needs on an annual basis.
- The cost of producing fully compliant engines that could be used in affected hazardous locations that are compliant with EPA's Tier 3 standards and EPA's Tier 4 standards.
- The typical equipment applications the engines are used in and the price of the equipment.
- The typical usage rates for these engines (hours per day or hours per year), by equipment application (if possible).
- Information regarding the past and likely future market response in the absence of additional flexibility for these engines (manufacturers have already been subject to Tier 4 standards for 2–4 years, after accounting for flexibility provisions to phase in the new standards).

Overcompliance Options

The locomotive regulations at 40 CFR 1033.101(l) include a provision allowing manufacturers to voluntary certify to a more stringent tier of standards or additional requirements. That provision states that ''once the locomotives become subject to the additional standards, they remain subject to those standards for the remainder of their service lives.'' Manufacturers have recently noted the value of provisions allowing them to voluntarily comply with more stringent standards.[23] Therefore, we request comment on whether or not similar provisions

[23] Letter from Matthew W. Spears of the Engine Manufacturers Association, January 10, 2020.

should be adopted for other sectors addressed in this proposal.

IV. Statutory Authority and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at *http://www2.epa.gov/laws-regulations/laws-and-executive-orders*.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget (OMB) for review.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

C. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control numbers 2060–0104, 2060–0287, 2060–0338, 2060–0545, 2060–0641. This rule clarifies and simplifies procedures without affecting information collection requirements.

D. Regulatory Flexibility Act (RFA)

I certify that this action would not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden or otherwise has a positive economic effect on the small entities subject to the rule. This proposed action is designed to reduce testing burdens, increase compliance flexibility, and make various corrections and adjustments to compliance provisions. We therefore anticipate no costs and no regulatory burden associated with this proposed rule. We have concluded that this proposed action will have no significant increase in regulatory burden for directly regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The proposed action imposes no enforceable duty on any state, local or tribal governments. Requirements for the private sector do not exceed $100 million in any one year.

F. 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.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. This proposed rule will be implemented at the Federal level and affects engine and vehicle manufacturers. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because there are no environmental health or safety risks created by this action that could present a disproportionate risk to children.

I. 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. We have concluded that this action is not likely to have any adverse energy effects because it is designed merely to reduce testing burdens, increase compliance flexibility, and make various corrections and adjustments to compliance provisions.

J. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR Part 51

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (''NTTAA''), Public Law 104–113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or 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. NTTAA directs agencies to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards. This action involves technical standards.

Except for the standards discussed below, the standards included in the regulatory text as incorporated by reference (in parts 60, 86, 1036, 1037, 1060, and 1065) were all previously approved for IBR and no change is proposed in this action.

In accordance with the requirements of 1 CFR 51.5, we are proposing to incorporate by reference the use of test methods and standards from ASTM International, SAE International, and the International Maritime Organization. This includes the following standards and test methods:

Standard or test method	Regulation	Summary
ASTM D3588–98, Reapproved 2017, Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels.	40 CFR 1036.530	Test method describes how to determine the lower heating value and other parameters for gaseous fuels.
ASTM D5769–15, Standard Test Method for Determination of Benzene, Toluene, and Total Aromatics in Finished Gasolines by Gas Chromatography/Mass Spectrometry.	40 CFR 86.1	Test method describes how to measure aromatic content of gasoline. This would be an alternative to the currently specified method in ASTM D1319, as described in Section II.A.3 for 40 CFR 1065.710.
ASTM D6550–15, Standard Test Method for Determination of Olefin Content of Gasolines by Supercritical-Fluid Chromatography.	40 CFR 86.1	Test method describes how to measure olefin content of gasoline. This would be an alternative to the currently specified method in ASTM D1319, as described in Section II.A.3 for 40 CFR 1065.710.

Standard or test method	Regulation	Summary
SAE J1634, July 2017, Battery Electric Vehicle Energy Consumption and Range Test Procedure.	40 CFR 1066.810	Recommended practice establishes uniform procedures for testing battery electric vehicles. This is an updated version of the document currently specified in the regulation.
Revised MARPOL Annex VI, Regulations for the Prevention of Pollution from Ships, Fourth Edition, 2017.	40 CFR 1042.910 and 40 CFR 1043.100.	Treaty defines international requirements for ships, including standards for fuel sulfur content and for NOx emissions from installed engines.
NOX Technical Code 2008, Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines, 2017 Edition.	40 CFR 1042.910 and 40 CFR 1043.100.	This document defines certification and measurement procedures for ships subject to standards under MARPOL Annex VI.

The materials from the International Maritime Organization are updated versions of documents that are already incorporated by reference in 40 CFR 1042.910 and 40 CFR 1043.100. We intend to include in the final rule any amendments adopted subsequent to the referenced 2017 publications.

The referenced standards and test methods may be obtained through the ASTM International website (*www.astm.org*) or by calling ASTM at (610) 832–9585, the SAE International website (*www.sae.org*) or by calling SAE International at (877) 606–7323 (U.S. and Canada) or (724) 776–4970 (outside the U.S. and Canada), the International Maritime Organization website (*www.imo.org*) or by calling the International Maritime Organization in London, England at 44-(0)20–7735–7611.

EPA is publishing a new version of the Greenhouse Gas Emission Model (GEM), which we use for certifying heavy-duty highway vehicles to the GHG emission standards in 40 CFR part 1037. The model calculates GHG emission rates for heavy-duty highway vehicles based on input values defined by the manufacturer. The model is available as noted in the proposed regulations at 40 CFR 1037.810.

We are removing numerous referenced documents as part of the effort to remove obsolete provisions in 40 CFR parts 85 through 94.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

EPA believes this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). Due to the small environmental impact, this proposed regulatory flexibility will not have a disproportionate adverse effect on minority populations, low-income populations, or indigenous peoples.

List of Subjects

40 CFR Part 9

Reporting and recordkeeping requirements.

40 CFR Part 59

Air pollution control, Confidential business information, Labeling, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

40 CFR Part 60

Administrative practice and procedure, Air pollution control, Aluminum, Beverages, Carbon monoxide, Chemicals, Coal, Electric power plants, Fluoride, Gasoline, Glass and glass products, Grains, Greenhouse gases, Household appliances, Incorporation by reference, Industrial facilities, Insulation, Intergovernmental relations, Iron, Labeling, Lead, Lime, Metals, Motor vehicles, Natural gas, Nitrogen dioxide, Petroleum, Phosphate, Plastics materials and synthetics, Polymers, Reporting and recordkeeping requirements, Rubber and rubber products, Sewage disposal, Steel, Sulfur oxides, Vinyl, Volatile organic compounds, Waste treatment and disposal, Zinc.

40 CFR Part 85

Confidential business information, Greenhouse gases, Imports, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Research, Warranties.

40 CFR Part 86

Administrative practice and procedure, Confidential business information, Incoporation by reference, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements.

40 CFR Part 88

Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements.

40 CFR Part 89

Administrative practice and procedure, Confidential business information, Imports, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Research, Vessels, Warranties.

40 CFR Part 90

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Reporting and recordkeeping requirements, Research, Warranties.

40 CFR Part 91

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 92

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Railroads, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 94

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Penalties, Reporting and recordkeeping requirements, Vessels, Warranties.

40 CFR Part 1027

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Reporting and recordkeeping requirements.

40 CFR Part 1033

Administrative practice and procedure, Confidential business information, Environmental protection, Labeling, Penalties, Railroads, Reporting and recordkeeping requirements.

40 CFR Part 1036

Administrative practice and procedure, Air pollution control, Confidential business information, Environmental protection, Greenhouse gases, Incorporation by reference,

Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1037

Administrative practice and procedure, Air pollution control, Confidential business information, Environmental protection, Incorporation by reference, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1039

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1042

Administrative practice and procedure, Air pollution control, Confidential business information, Environmental protection, Imports, Incorporation by reference, Labeling, Penalties, Reporting and recordkeeping requirements, Vessels, Warranties.

40 CFR Part 1043

Administrative practice and procedure, Air pollution control, Imports, Incorporation by reference, Reporting and recordkeeping requirements, Vessels.

40 CFR Part 1045

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1048

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Penalties, Reporting and recordkeeping requirements, Research, Warranties.

40 CFR Part 1051

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1054

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1060

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Incorporation by reference, Labeling, Penalties, Reporting and recordkeeping requirements, Warranties.

40 CFR Part 1065

Administrative practice and procedure, Air pollution control, Incorporation by reference, Reporting and recordkeeping requirements, Research.

40 CFR Part 1066

Air pollution control, Incorporation by reference, Reporting and recordkeeping requirements.

40 CFR Part 1068

Administrative practice and procedure, Air pollution control, Confidential business information, Imports, Motor vehicle pollution, Penalties, Reporting and recordkeeping requirements, Warranties.

Dated: March 13, 2020.

Andrew R. Wheeler,

Administrator.

For the reasons set out in the preamble, we propose to amend title 40, chapter I of the Code of Federal Regulations as set forth below.

PART 9—OMB APPROVALS UNDER THE PAPERWORK REDUCTION ACT

Contents

■ 1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 *et seq.,* 136–136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. 331j, 346a, 31 U.S.C. 9701; 33 U.S.C. 1251 *et seq.,* 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345 (d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–1, 300j–2, 300j–3, 300j–4, 300j–9, 1857 *et seq.,* 6901–6992k, 7401–7671q, 7542, 9601–9657, 11023, 11048.

■ 2. Amend § 9.1 by:

■ a. Removing entries for 85.1403 through 85.1415, 85.1514, 85.1712, 85.1808, 85.2208, and 85.2401 through 85.2409;

■ b. Revising the entries under the heading ''Control of Emissions From New and In-Use Highway Vehicles and Engine'';

■ c. Removing the heading ''Clean-Fuel Vehicles'' and the items under that heading;

■ d. Removing the heading ''Control of Emissions From New and In-Use Nonroad Compression-Ignition Engines'' and the items under that heading;

■ e. Removing the heading ''Control of Emissions From New and In-use Nonroad Engines'' and the items under that heading;

■ f. Removing the heading ''Control of Emissions From New and In-Use Marine Compression-Ignition Engines'' and the items under that heading;

■ g. Revising the entries under the heading ''Fuel Economy of Motor Vehicles'';

■ h. Revising the entry for ''1033.825'' to read as ''1033.925'' and

■ i. Revising the entry for ''1042.825'' to read as ''1042.925''.

The revisions read as follows:

§ 9.1 OMB approvals under the Paperwork Reduction Act.

* * * * *

Control of Air Pollution From Motor Vehicles and Motor Vehicle Engines	
85.503	2060–0104
85.505	2060–0104
85.1504	2060–0095
85.1505	2060–0095
85.1507	2060–0095
85.1508	2060–0095
85.1509	2060–0095
85.1511	2060–0095
85.1512	2060–0095
85.1705	2060–0104
85.1706	2060–0104
85.1708	2060–0104
85.1710	2060–0104
85.1802	2060–0104
85.1803	2060–0104
85.1806	2060–0104
85.1903	2060–0104
85.1904	2060–0104
85.1905	2060–0104
85.1906	2060–0104
85.1908	2060–0104
85.1909	2060–0104
85.2110	2060–0104
85.2114	2060–0060
85.2115	2060–0060
85.2116	2060–0060
85.2117	2060–0060
85.2118	2060–0060
85.2119	2060–0060
85.2120	2060–0060

Control of Emissions From New and In-Use Highway Vehicles and Engines	
86.000–7	2060–0104
86.000–24	2060–0104
86.001–21	2060–0104
86.001–23	2060–0104
86.001–24	2060–0104
86.004–28	2060–0104
86.004–38	2060–0104
86.004–40	2060–0104
86.079–31—86.079–33	2060–0104
86.079–39	2060–0104
86.080–12	2060–0104
86.082–34	2060–0104
86.085–37	2060–0104
86.090–27	2060–0104
86.091–7	2060–0104
86.094–21	2060–0104
86.094–25	2060–0104
86.094–30	2060–0104
86.095–14	2060–0104

86.095–35	2060–0104
86.096–24	2060–0104
86.098–23	2060–0104
86.099–10	2060–0104
86.107–98	2060–0104
86.108–00	2060–0104
86.111–94	2060–0104
86.113–15	2060–0104
86.113–94	2060–0104
86.129–00	2060–0104
86.142–90	2060–0104
86.144–94	2060–0104
86.150–98	2060–0104
86.155–98	2060–0104
86.159–08	2060–0104
86.160–00	2060–0104
86.161–00	2060–0104
86.162–03	2060–0104
86.163–00	2060–0104
86.412–78	2060–0104
86.414–78	2060–0104
86.415–78	2060–0104
86.416–80	2060–0104
86.421–78	2060–0104
86.423–78	2060–0104
86.427–78	2060–0104
86.428–80	2060–0104
86.429–78	2060–0104
86.431–78	2060–0104
86.432–78	2060–0104
86.434–78	2060–0104
86.435–78	2060–0104
86.436–78	2060–0104
86.437–78	2060–0104
86.438–78	2060–0104
86.439–78	2060–0104
86.440–78	2060–0104
86.445–2006	2060–0104
86.446–2006	2060–0104
86.447–2006	2060–0104
86.448–2006	2060–0104
86.449	2060–0104
86.513	2060–0104
86.537–90	2060–0104
86.542–90	2060–0104
86.603–98	2060–0104
86.604–84	2060–0104
86.605–98	2060–0104
86.606–84	2060–0104
86.607–84	2060–0104
86.609–98	2060–0104
86.612–97	2060–0104
86.614–84	2060–0104
86.615–84	2060–0104
86.884–5	2060–0104
86.884–7	2060–0104
86.884–9	2060–0104
86.884–10	2060–0104
86.884–12	2060–0104
86.884–13	2060–0104
86.1106–87	2060–0104
86.1107–87	2060–0104
86.1108–87	2060–0104
86.1110–87	2060–0104
86.1111–87	2060–0104
86.1113–87	2060–0104
86.1114–87	2060–0104
86.1805–17	2060–0104
86.1806–17	2060–0104
86.1809–12	2060–0104
86.1811–17	2060–0104
86.1823–08	2060–0104
86.1826–01	2060–0104
86.1829–15	2060–0104
86.1839–01	2060–0104
86.1840–01	2060–0104
86.1842–01	2060–0104
86.1843–01	2060–0104
86.1844–01	2060–0104
86.1845–04	2060–0104
86.1847–01	2060–0104
86.1862–04	2060–0104
86.1920–86.1925	2060–0287

* * * * *

Fuel Economy of Motor Vehicles	
600.005	2060–0104
600.006	2060–0104
600.007	2060–0104
600.010	2060–0104
600.113–12	2060–0104
600.206–12	2060–0104
600.207–12	2060–0104
600.209–12	2060–0104
600.301—600.314–08	2060–0104
600.507–12	2060–0104
600.509–12	2060–0104
600.510–12	2060–0104
600.512–12	2060–0104

* * * * *

PART 59—NATIONAL VOLATILE ORGANIC COMPOUND EMISSION STANDARDS FOR CONSUMER AND COMMERCIAL PRODUCTS

■ 3. The authority citation for part 59 continues to read as follows:

Authority: 42 U.S.C. 7414 and 7511b(e).

Subpart F—[Amended]

■ 4. Amend § 59.626 by revising paragraph (e) to read as follows:

§ 59.626 What emission testing must I perform for my application for a certificate of conformity?

* * * * *

(e) We may require you to test units of the same or different configuration in addition to the units tested under paragraph (b) of this section.

* * * * *

■ 5. Amend § 59.628 by revising paragraph (b) to read as follows:

§ 59.628 What records must I keep and what reports must I send to EPA?

* * * * *

(b) Keep required data from emission tests and all other information specified in this subpart for five years after we issue the associated certificate of conformity. If you use the same emission data or other information for a later production period, the five-year period restarts with each new production period if you continue to rely on the information.

* * * * *

■ 6. Amend § 59.650 by revising paragraph (c) to read as follows:

§ 59.650 General testing provisions.

* * * * *

(c) The specification for gasoline to be used for testing is given in 40 CFR 1065.710(c). Use the grade of gasoline specified for general testing. Blend this grade of gasoline with reagent grade ethanol in a volumetric ratio of 90.0 percent gasoline to 10.0 percent ethanol to achieve a blended fuel that has 10.0 ±1.0 percent ethanol by volume. You may use ethanol that is less pure if you can demonstrate that it will not affect your ability to demonstrate compliance with the applicable emission standards.

* * * * *

■ 7. Amend § 59.653 by revising paragraphs (a)(1), (a)(3), and (a)(4)(ii)(C) to read as follows:

§ 59.653 How do I test portable fuel containers?

* * * * *

(a) * * *

(1) *Pressure cycling.* Perform a pressure test by sealing the container and cycling it between +13.8 and −3.4 kPa (+2.0 and −0.5 psig) for 10,000 cycles at a rate of 60 seconds per cycle. For this test, the spout may be removed and the pressure applied through the opening where the spout attaches. The purpose of this test is to represent environmental wall stresses caused by pressure changes and other factors (such as vibration or thermal expansion). If your container cannot be tested using the pressure cycles specified by this paragraph (a)(1), you may ask to use special test procedures under § 59.652(c).

* * * * *

(3) *Slosh testing.* Perform a slosh test by filling the portable fuel container to 40 percent of its capacity with the fuel specified in paragraph (e) of this section and rocking it at a rate of 15 cycles per minute until you reach one million total cycles. Use an angle deviation of +15° to −15° from level. Take steps to ensure that the fuel remains at 40 percent of its capacity throughout the test run.

(4) * * *

(ii) * * *

(C) Actuate the spout by fully opening and closing without dispensing fuel. The spout must return to the closed position without the aid of the operator (*e.g.,* pushing or pulling the spout closed). Repeat for a total of 10 actuations. If at any point the spout fails to return to the closed position, the container fails the diurnal test.

* * * * *

■ 8. Amend § 59.660 by revising paragraph (b) to read as follows:

§ 59.660 Exemption from the standards.

* * * * *

(b) Manufacturers and other persons subject to the prohibitions in § 59.602 may ask us to exempt portable fuel containers to purchase, sell, or distribute them for the sole purpose of testing them.

* * * * *

■ 9. Amend § 59.664 by revising paragraph (c) to read as follows:

§ 59.664 What are the requirements for importing portable fuel containers into the United States?

* * * * *

(c) You may meet the bond requirements of this section by obtaining a bond from a third-party surety that is cited in the U.S. Department of Treasury Circular 570, ''Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies'' (*https://www.fiscal.treasury.gov/surety-bonds/circular-570.html*).

* * * * *

■ 10. Amend § 59.680 by revising the definition of ''Portable fuel container'' to read as follows:

§ 59.680 What definitions apply to this subpart?

* * * * *

Portable fuel container means a reusable container of any color that is designed and marketed (or otherwise intended) for use by consumers for receiving, transporting, storing, and dispensing gasoline, diesel fuel, or kerosene. For the purposes of this subpart, all utility jugs that are red, yellow or blue in color are deemed to be portable fuel containers, regardless of how they are labeled or marketed.

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PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

■ 11. The authority statement for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

■ 12. Amend § 60.4200 by revising paragraph (d) to read as follows:

§ 60.4200 Am I subject to this subpart?

* * * * *

(d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C, except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

■ 13. Amend § 60.4201 by revising paragraph (a), paragraph (d) introductory text, paragraph (f) introductory text, and paragraph (h) to read as follows:

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115 and 40 CFR part 1039, Appendix I, as applicable, for all pollutants, for the same model year and maximum engine power.

* * * * *

(d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the appropriate Tier 2 emission standards for new marine CI engines as described in 40 CFR part 1042, Appendix I, for all pollutants, for the same displacement and rated power:

* * * * *

(f) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary non-emergency CI ICE identified in paragraphs (a) and (c) of this section may be certified to the provisions of 40 CFR part 1042 for commercial engines that are applicable for the engine's model year, displacement, power density, and maximum engine power if the engines will be used solely in either or both of the following locations:

* * * * *

(h) Stationary CI ICE certified to the standards in 40 CFR part 1039 and equipped with auxiliary emission control devices (AECDs) as specified in 40 CFR 1039.665 must meet the Tier 1 certification emission standards for new nonroad CI engines in 40 CFR part 1039, Appendix I while the AECD is activated during a qualified emergency situation. A qualified emergency situation is defined in 40 CFR 1039.665. When the qualified emergency situation has ended and the AECD is deactivated, the engine must resume meeting the otherwise applicable emission standard specified in this section.

■ 14. Amend § 60.4202 by revising paragraphs (a)(1)(i), (a)(2), (b)(2), paragraph (e) introductory text, and paragraph (g) introductory text to read as follows:

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

(a) * * *

(1) * * *

(i) The Tier 2 emission standards for new nonroad CI engines for the appropriate rated power as described in 40 CFR part 1039, Appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 for model year 2007 engines, and

* * * * *

(2) For engines with a rated power greater than or equal to 37 KW (50 HP), the Tier 2 or Tier 3 emission standards for new nonroad CI engines for the same rated power as described in 40 CFR part 1039, Appendix I for all pollutants and the smoke standards as specified in 40 CFR 1039.105 beginning in model year 2007.

(b) * * *

(2) For 2011 model year and later, the Tier 2 emission standards as described in 40 CFR part 1039, Appendix I for all pollutants and the smoke standards as specified in 40 CFR 1039.105.

* * * * *

(e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the appropriate Tier 2 emission standards for new marine CI engines as described in 40 CFR part 1042, Appendix I,, for all pollutants, for the same displacement and rated power:

* * * * *

(g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI ICE identified in paragraphs (a) and (c) of this section may be certified to the provisions of 40 CFR part 1042 for commercial engines that are applicable for the engine's model year, displacement, power density, and maximum engine power if the engines will be used solely in either or both of the locations identified in paragraphs (g)(1) and (2) of this section. Engines that would be subject to the Tier 4 standards in 40 CFR part 1042 that are used solely in either or both of the locations identified in paragraphs (g)(1) and (2) of this section may instead continue to be certified to the appropriate Tier 3 standards in 40 CFR part 1042.

* * * * *

■ 15. Amend § 60.4204 by revising paragraphs (a) and (f) to read as follows:

§ 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per

cylinder must comply with the Tier 1 emission standards in 40 CFR part 1042, Appendix I.

* * * * *

(f) Owners and operators of stationary CI ICE certified to the standards in 40 CFR part 1039 and equipped with AECDs as specified in 40 CFR 1039.665 must meet the Tier 1 certification emission standards for new nonroad CI engines in 40 CFR part 1039, Appendix I while the AECD is activated during a qualified emergency situation. A qualified emergency situation is defined in 40 CFR 1039.665. When the qualified emergency situation has ended and the AECD is deactivated, the engine must resume meeting the otherwise applicable emission standard specified in this section.

■ 16. Amend § 60.4205 by revising paragraph (a) to read as follows:

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to subpart IIII. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the Tier 1 emission standards in 40 CFR part 1042, appendix I.

* * * * *

■ 17. Amend § 60.4210 by revising paragraphs (a) and (b), paragraph (c) introductory text, paragraphs (c)(3), (d), (i), and (j) and adding paragraph (k) to read as follows:

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in § 60.4201(a) through (c) and § 60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 1039, subpart C, and must test their engines as specified in 40 CFR part 1039. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same certification procedures required for engines certified to the Tier 1 standards in 40 CFR part 1039, appendix I. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same certification procedures required for engines certified to the Tier 1 standards in 40 CFR part 1039, appendix I, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

(b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in § 60.4201(d) and (e) and § 60.4202(e) and (f) using the certification procedures required in 40 CFR part 1042, subpart C, and must test their engines as specified in 40 CFR part 1042.

(c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

* * * * *

(3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

(i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR part 1039 or 1042, as appropriate.

(ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR part 1039 or 1042, as appropriate, but the words ''stationary'' must be included instead of ''nonroad'' or ''marine'' on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.

(iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.

(d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR part 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.

* * * * *

(i) The replacement engine provisions of 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

(j) Stationary CI ICE manufacturers may equip their stationary CI internal combustion engines certified to the emission standards in 40 CFR part 1039 with AECDs for qualified emergency situations according to the requirements of 40 CFR 1039.665. Manufacturers of stationary CI ICE equipped with AECDs as allowed by 40 CFR 1039.665 must meet all the requirements in 40 CFR 1039.665 that apply to manufacturers. Manufacturers must document that the engine complies with the Tier 1 standard in 40 CFR part 1039, appendix I, when the AECD is activated. Manufacturers must provide any relevant testing, engineering analysis, or other information in sufficient detail to support such statement when applying for certification (including amending an existing certificate) of an engine equipped with an AECD as allowed by 40 CFR 1039.665.

(k) Manufacturers may certify their emergency stationary CI internal combustion engines under this section using assigned deterioration factors established by EPA.

■ 18. Amend § 60.4211 by revising paragraphs (a)(3) and (b)(1) to read as follows:

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) * * *

(3) Meet the requirements of 40 CFR part 1068, as they apply to you.

(b) * * *

(1) Purchasing an engine certified to emission standards for the same model year and maximum engine power as described in 40 CFR part 1039 and part 1042, as applicable. The engine must be installed and configured according to the manufacturer's specifications.

* * * * *

■ 19. Amend § 60.4212 by revising paragraphs (a) and (c) to read as follows:

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

* * * * *

(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder. Alternatively, stationary CI ICE that are complying with Tier 2 or Tier 3 emission standards as described in 40 CFR part 1039, appendix I, or with Tier 2 emission standards as described in 40 CFR part 1042, Appendix I, may follow the testing procedures specified in § 60.4213, as appropriate.

* * * * *

(c) Exhaust emissions from stationary CI ICE subject to Tier 2 or Tier 3 emission standards as described in 40 CFR part 1039, appendix I, or Tier 2 emission standards as described in 40 CFR part 1042, Appendix I, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard, determined from the following equation:

NTE requirement for each pollutant = (1.25) × (STD) (Eq. 1)

Where:

STD = The standard specified for that pollutant in 40 CFR part 1039 or part 1042, as applicable.

* * * * *

■ 20. Amend § 60.4216 by revising paragraphs (b) and (c) to read as follows:

§ 60.4216 What requirements must I meet for engines used in Alaska?

* * * * *

(b) Except as indicated in paragraph (c) of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in remote areas of Alaska may meet the requirements of this subpart by manufacturing and installing engines meeting the Tier 2 or Tier 3 emission standards described in 40 CFR part 1042 for the same model year, displacement, and maximum engine power, as appropriate, rather than the otherwise applicable requirements of 40 CFR part 1039, as indicated in §§ 60.4201(f) and 60.4202(g).

(c) Manufacturers, owners, and operators of stationary CI ICE that are located in remote areas of Alaska may choose to meet the applicable emission standards for emergency engines in §§ 60.4202 and 60.4205, and not those for non-emergency engines in §§ 60.4201 and 60.4204, except that for 2014 model year and later nonemergency CI ICE, the owner or operator of any such engine must have that engine certified as meeting at least the Tier 3 p.m. standards identified in appendix I of 40 CFR part 1039 or in 40 CFR 1042.101.

* * * * *

■ 21. Amend § 60.4219 by revising the definition for ''Certified emissions life'' to read as follows:

§ 60.4219 What definitions apply to this subpart?

* * * * *

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 1042.101(e).

* * * * *

Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

■ 22. Amend § 60.4230 by revising paragraph (e) to read as follows:

§ 60.4230 Am I subject to this subpart?

* * * * *

(e) Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 1048 and 1054, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

* * * * *

■ 23. Amend § 60.4231 by revising paragraphs (a) through (d) to read as follows:

§ 60.4231 What emission standards must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing such engines?

(a) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008 to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1054, as follows:

If engine displacement is * * *	and manufacturing dates are * * *	the engine must meet the following nonhandheld emission standards identified in 40 CFR part 1054 and related requirements:
(1) below 225 cc	July 1, 2008 to December 31, 2011	Phase 2.
(2) below 225 cc	January 1, 2012 or later	Phase 3.
(3) at or above 225 cc	July 1, 2008 to December 31, 2010	Phase 2.
(4) at or above 225 cc	January 1, 2011 or later	Phase 3.

(b) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that use gasoline and that are manufactured on or after the applicable date in § 60.4230(a)(2), or manufactured on or after the applicable date in § 60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and

other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE with a maximum engine power greater than 25 HP and less than 130 HP that use gasoline and that are manufactured on or after the applicable date in § 60.4230(a)(4) to the Phase 1 emission standards in 40 CFR part 1054, Appendix I, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 1054. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cubic centimeters (cc) that use gasoline to the certification emission standards and other requirements as appropriate for new nonroad SI engines in 40 CFR part 1054.

(c) Stationary SI internal combustion engine manufacturers must certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) (except emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) that are rich burn engines that use LPG and that are manufactured on or after the applicable date in § 60.4230(a)(2), or manufactured on or after the applicable date in § 60.4230(a)(4) for emergency stationary ICE with a maximum engine power greater than or equal to 130 HP, to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers must certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP that are rich burn engines that use LPG and that are manufactured on or after the applicable date in § 60.4230(a)(4) to the Phase 1 emission standards in 40 CFR part 1054, appendix I, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 1054. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc that are rich burn engines that use LPG to the certification emission standards and other requirements as appropriate for new nonroad SI engines in 40 CFR part 1054.

(d) Stationary SI internal combustion engine manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) under the voluntary manufacturer certification program described in this subpart must certify those engines to the certification emission standards for new nonroad SI engines in 40 CFR part 1048. Stationary SI internal combustion engine manufacturers who choose to certify their emergency stationary SI ICE greater than 25 HP and less than 130 HP (except gasoline and rich burn engines that use LPG), must certify those engines to the Phase 1 emission standards in 40 CFR part 1054, Appendix I, applicable to class II engines, for new nonroad SI engines in 40 CFR part 1054. Stationary SI internal combustion engine manufacturers may certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc (except gasoline and rich burn engines that use LPG) to the certification emission standards and other requirements as appropriate for new nonroad SI engines in 40 CFR part 1054. For stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG and emergency stationary ICE with a maximum engine power greater than 25 HP and less than 130 HP) manufactured prior to January 1, 2011, manufacturers may choose to certify these engines to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP.

* * * * *

■ 24. Revise § 60.4238 to read as follows:

§ 60.4238 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines ≤19 KW (25 HP) or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in § 60.4231(a) must certify their stationary SI ICE using the certification and testing procedures required in 40 CFR part 1054, subparts C and F. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

■ 25. Revise § 60.4239 to read as follows:

§ 60.4239 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that use gasoline or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in § 60.4231(b) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1054, and manufacturers of stationary SI emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 emission standards in 40 CFR part 1054, appendix I, applicable to class II engines, must certify their stationary SI ICE using the certification and testing procedures required in 40 CFR part 1054, subparts C and F. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

■ 26. Revise § 60.4240 to read as follows:

§ 60.4240 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that are rich burn engines that use LPG or a manufacturer of equipment containing such engines?

Stationary SI internal combustion engine manufacturers who are subject to the emission standards specified in § 60.4231(c) must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must test their engines as specified in that part. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1054, and manufacturers of stationary SI emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 emission standards in 40 CFR part 1054, appendix I, applicable to class II engines, must certify their stationary SI ICE using the certification

and testing procedures required in 40 CFR part 1054, subparts C and F. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

■ 27. Amend § 60.4241 by revising paragraphs (a) and (b) to read as follows:

§ 60.4241 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines participating in the voluntary certification program or a manufacturer of equipment containing such engines?

(a) Manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to certify their engines to the emission standards in § 60.4231(d) or (e), as applicable, under the voluntary certification program described in this subpart. Manufacturers who certify their engines under the voluntary certification program must meet the requirements as specified in paragraphs (b) through (g) of this section. In addition, manufacturers of stationary SI internal combustion engines who choose to certify their engines under the voluntary certification program, must also meet the requirements as specified in § 60.4247. Manufacturers of stationary SI internal combustion engines who choose not to certify their engines under this section must notify the ultimate purchaser that testing requirements apply as described in § 60.4243(b)(2); manufacturers must keep a copy of this notification for five years after shipping each engine and make those documents available to EPA upon request.

(b) Manufacturers of engines other than those certified to standards in 40 CFR part 1054 must certify their stationary SI ICE using the certification procedures required in 40 CFR part 1048, subpart C, and must follow the same test procedures that apply to large SI nonroad engines under 40 CFR part 1048, but must use the D–1 cycle of International Organization of Standardization 8178–4: 1996(E) (incorporated by reference, see 40 CFR 60.17) or the test cycle requirements specified in Table 3 to 40 CFR 1048.505, except that Table 3 of 40 CFR 1048.505 applies to high load engines only. Manufacturers may certify their stationary emergency engines at or above 130 hp using assigned deterioration factors established by EPA. Stationary SI internal combustion engine manufacturers who certify their stationary SI ICE with a maximum engine power less than or equal to 30 KW (40 HP) with a total displacement less than or equal to 1,000 cc to the certification emission standards and other requirements for new nonroad SI engines in 40 CFR part 1054, and manufacturers of emergency engines that are greater than 25 HP and less than 130 HP who meet the Phase 1 standards in 40 CFR part 1054, appendix I, applicable to class II engines, must certify their stationary SI ICE using the certification and testing procedures required in 40 CFR part 1054, subparts C and F. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, subpart C, to the extent they apply to equipment manufacturers.

* * * * *

■ 28. Revise § 60.4242 to read as follows:

§ 60.4242 What other requirements must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

(a) Stationary SI internal combustion engine manufacturers must meet the provisions of 40 CFR parts 1048, 1054, and 1068, as applicable, except that engines certified pursuant to the voluntary certification procedures in § 60.4241 are subject only to the provisions indicated in § 60.4247 and are permitted to provide instructions to owners and operators allowing for deviations from certified configurations, if such deviations are consistent with the provisions of paragraphs § 60.4241(c) through (f). Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060, as applicable. Labels on engines certified to 40 CFR part 1048 must refer to stationary engines, rather than or in addition to nonroad engines, as appropriate.

(b) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards identified in 40 CFR part 1048 or 1054 for that model year may certify any such family that contains both nonroad and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts. This provision also applies to equipment or component manufacturers certifying to standards under 40 CFR part 1060.

(c) Manufacturers of engine families certified to 40 CFR part 1048 may meet the labeling requirements referred to in paragraph (a) of this section for stationary SI ICE by either adding a separate label containing the information required in paragraph (a) of this section or by adding the words ''and stationary'' after the word ''nonroad'' to the label.

(d) For all engines manufactured on or after January 1, 2011, and for all engines with a maximum engine power greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, a stationary SI engine manufacturer that certifies an engine family solely to the standards applicable to emergency engines must add a permanent label stating that the engines in that family are for emergency use only. The label must be added according to the labeling requirements specified in 40 CFR 1048.135(b).

(e) All stationary SI engines subject to mandatory certification that do not meet the requirements of this subpart must be labeled and exported according to 40 CFR 1068.230. Manufacturers of stationary engines with a maximum engine power greater than 25 HP that are not certified to standards and other requirements under 40 CFR part 1048 are subject to the labeling provisions of 40 CFR 1048.20 pertaining to excluded stationary engines.

(f) For manufacturers of gaseous-fueled stationary engines required to meet the warranty provisions in 1054.120, we may establish an hour-based warranty period equal to at least the certified emissions life of the engines (in engine operating hours) if we determine that these engines are likely to operate for a number of hours greater than the applicable useful life within 24 months. We will not approve an alternate warranty under this paragraph (f) for nonroad engines. An alternate warranty period approved under this paragraph (f) will be the specified number of engine operating hours or two years, whichever comes first. The engine manufacturer shall request this alternate warranty period in its application for certification or in an earlier submission. We may approve an alternate warranty period for an engine family subject to the following conditions:

(1) The engines must be equipped with non-resettable hour meters.

(2) The engines must be designed to operate for a number of hours substantially greater than the applicable certified emissions life.

(3) The emission-related warranty for the engines may not be shorter than any published warranty offered by the manufacturer without charge for the engines. Similarly, the emission-related warranty for any component shall not be shorter than any published warranty offered by the manufacturer without charge for that component.

■ 29. Amend § 60.4243 by revising paragraph (f) to read as follows:

§ 60.4243 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

* * * * *

(f) If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 1068.120(b).

* * * * *

■ 30. Amend § 60.4245 by revising paragraph (a)(3) to read as follows:

§ 60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

* * * * *

(a) * * *

(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 1048, 1054, and 1060, as applicable.

* * * * *

■ 31. Amend § 60.4247 by revising paragraph (a) to read as follows:

§ 60.4247 What parts of the mobile source provisions apply to me if I am a manufacturer of stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

(a) Manufacturers certifying to emission standards in 40 CFR part 1054 must meet the provisions of 40 CFR part 1054. Note that 40 CFR part 1054, Appendix I, describes various provisions that do not apply for engines meeting Phase 1 standards. Manufacturers of equipment containing stationary SI internal combustion engines meeting the provisions of 40 CFR part 1054 must meet the provisions of 40 CFR part 1060 to the extent they apply to equipment manufacturers.

* * * * *

■ 32. Amend § 60.4248 by revising the definition for ''Certified emissions life'' and ''Certified stationary internal combustion engine'' to read as follows:

§ 60.4248 What definitions apply to this subpart?

* * * * *

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) are given in 40 CFR 1054.107 and 40 CFR 1060.101, as appropriate. The values for certified emissions life for stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) certified to 40 CFR part 1048 are given in 40 CFR 1048.101(g). The certified emissions life for stationary SI ICE with a maximum engine power greater than 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first. You may request in your application for certification that we approve a shorter certified emissions life for an engine family. We may approve a shorter certified emissions life, in hours of engine operation but not in years, if we determine that these engines will rarely operate longer than the shorter certified emissions life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use engines. In other cases, your demonstration must include an engineering analysis of information equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information. The certified emissions life value may not be shorter than any of the following:

(1) 1,000 hours of operation.

(2) Your recommended overhaul interval.

(3) Your mechanical warranty for the engine.

Certified stationary internal combustion engine means an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in this part, or of 40 CFR part 1048 or 40 CFR part 1054, as appropriate.

* * * * *

PART 85—CONTROL OF AIR POLLUTION FROM MOBILE SOURCES

■ 33. The authority citation for part 85 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart O—[Removed and Reserved]

■ 34. Remove and reserve Subpart O, consisting of §§ 85.1401 through 85.1415

■ 35. Amend § 85.1501 by revising paragraph (a) to read as follows:

§ 85.1501 Applicability.

(a) Except where otherwise indicated, this subpart is applicable to motor vehicles offered for importation or imported into the United States for which the Administrator has promulgated regulations under 40 CFR part 86, subpart S, prescribing emission standards, but which are not covered by certificates of conformity issued under section 206(a) of the Clean Air Act (*i.e.,* which are nonconforming vehicles as defined below), as amended, and part 86 at the time of conditional importation. Compliance with regulations under this subpart shall not relieve any person or entity from compliance with other applicable provisions of the Clean Air Act. This subpart no longer applies for heavy-duty engines certified under 40 CFR part 86, subpart A; references in this subpart to ''engines'' therefore do not apply.

* * * * *

■ 36. Amend § 85.1511 by adding introductory text and paragraph (b)(5) to read as follows:

§ 85.1511 Exemptions and exclusions.

The exemption provisions of 40 CFR part 1068, subpart D, apply instead of the provisions of this section for heavy-duty motor vehicles and heavy-duty motor vehicle engines regulated under 40 CFR part 86, subpart A, 40 CFR part 1036, and 40 CFR part 1037. The following provisions apply for other motor vehicles and motor vehicle engines:

* * * * *

(b) * * *

(5) *Export exemption.* Vehicles may qualify for a temporary exemption

under the provisions of 40 CFR 1068.325(d).

* * * * *

■ 37. Revise § 85.1514 to read as follows:

§ 85.1514 Treatment of confidential information.

The provisions of 40 CFR 1068.10 apply for information you consider confidential.

■ 38. Amend § 85.1701 by revising paragraph (a)(1) to read as follows:

§ 85.1701 General applicability.

(a) * * *

(1) Beginning January 1, 2014, the exemption provisions of 40 CFR part 1068, subpart C, apply instead of the provisions of this subpart for heavy-duty motor vehicle engines regulated under 40 CFR part 86, subpart A, except that the nonroad competition exemption of 40 CFR 1068.235 and the nonroad hardship exemption provisions of 40 CFR 1068.245, 1068.250, and 1068.255 do not apply for motor vehicle engines. Note that the provisions for emergency vehicle field modifications in § 85.1716 continue to apply for heavy-duty engines.

* * * * *

■ 39. Revise § 85.1712 to read as follows:

§ 85.1712 Treatment of confidential information.

The provisions of 40 CFR 1068.10 apply for information you consider confidential.

■ 40. Revise § 85.1801 to read as follows:

§ 85.1801 Applicability and definitions.

(a) The recall provisions of 40 CFR part 1068, subpart E, apply instead of the provisions of this subpart for heavy-duty motor vehicles and heavy-duty motor vehicle engines regulated under 40 CFR part 86, subpart A, 40 CFR part 1036, and 40 CFR part 1037. The provisions of this subpart S apply for other motor vehicles and motor vehicle engines.

(b) For the purposes of this subpart, except as otherwise provided, words shall be defined as provided for by sections 214 and 302 of the Clean Air Act, 42 U.S.C. 1857, as amended.

(1) *Act* shall mean the Clean Air Act, 42 U.S.C. 1857, as amended.

(2) *Days* shall mean calendar days.

■ 41. Revise § 85.1807 to read as follows:

§ 85.1807 Public hearings.

Manufacturers may request a hearing as described in 40 CFR part 1068, subpart G.

■ 42. Revise § 85.1808 to read as follows:

§ 85.1808 Treatment of confidential information.

The provisions of 40 CFR 1068.10 apply for information you consider confidential.

■ 43. Amend § 85.1902 by revising paragraph (b)(2) to read as follows:

§ 85.1902 Definitions.

* * * * *

(b) * * *

(2) A defect in the design, materials, or workmanship in one or more emission-related parts, components, systems, software or elements of design which must function properly to ensure continued compliance with greenhouse gas emission standards.

* * * * *

■ 44. Amend § 85.2102 revising paragraph (a)(18) and by adding and reserving paragraph (b) to read as follows:

§ 85.2102 Definitions.

(a) * * *

(18) *MOD Director* has the meaning given for ''Designated Compliance Officer'' in 40 CFR 1068.30.

(b) [Reserved].

■ 45. Amend § 85.2115 by revising paragraph (a)(4) to read as follows:

§ 85.2115 Notification of intent to certify.

(a) * * *

(4) Two complete and identical copies of the notification and any subsequent industry comments on any such notification shall be submitted by the aftermarket manufacturer to: MOD Director.

* * * * *

■ 46. Revise § 85.2301 to read as follows:

§ 85.2301 Applicability.

The definitions provided by this subpart are effective February 23, 1995 and apply to all motor vehicles regulated under 40 CFR part 86, subpart S, and to highway motorcycles regulated under 40 CFR part 86, subparts E and F. The definitions and related provisions in 40 CFR part 1036, 40 CFR part 1037, and 40 CFR part 1068 apply instead of the provisions in this subpart for heavy-duty motor vehicles and heavy-duty motor vehicle engines regulated under 40 CFR part 86, subpart A, 40 CFR part 1036, and 40 CFR part 1037.

PART 86—CONTROL OF EMISSIONS FROM NEW AND IN-USE HIGHWAY VEHICLES AND ENGINES

■ 47. The authority statement for part 86 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 48. Section 86.1 is amended by:

■ a. Revising the last sentence of paragraph (a);

■ b. Redesignating paragraphs (b)(19) through (21) as paragraphs (b)(21) through (23); and

■ c. Adding new paragraphs (b)(19) and (20).

The revision and additions read as follows:

(a) * * *. For information on the availability of this material at NARA, email *fedreg.legal@nara.gov*, or go to *www.archives.gov/federal-register/cfr/ibr-locations.html*.

* * * * *

(b) * * *

(19) ASTM D5769–15, Standard Test Method for Determination of Benzene, Toluene, and Total Aromatics in Finished Gasolines by Gas Chromatography/Mass Spectrometry, approved December 1, 2015 (''ASTM5769''), IBR approved for §§ 86.113–04(a), 86.213(a), and 86.513(a).

(20) ASTM D6550–15, Standard Test Method for Determination of Olefin Content of Gasolines by Supercritical-Fluid Chromatography, approved December 1, 2015 (''ASTM D6550''), IBR approved for §§ 86.113–04(a), 86.213(a), and 86.513(a).

* * * * *

■ 49. Section 86.004–15 is amended by revising paragraph (a)(1) to read as follows:

§ 86.004–15 NO_X plus NMHC and particulate averaging, trading, and banking for heavy-duty engines.

(a)(1) Heavy-duty engines eligible for NO_X plus NMHC and particulate averaging, trading and banking programs are described in the applicable emission standards sections in this subpart. For manufacturers not selecting Options 1 or 2 contained in § 86.005–10(f), the ABT program requirements contained in § 86.000–15 apply for 2004 model year Otto-cycle engines, rather than the provisions contained in this § 86.004–15. Participation in these programs is voluntary.

* * * * *

■ 50. Section 86.010–18 is amended by—

■ a. Revising paragraphs (a)(5), (g)(2)(ii)(B), and (g)(2)(iii)(C).

■ b. Adding paragraph (g)(2)(iii)(D).

■ c. Removing and reserving paragraph (l)(2)(ii).

■ d. Revising paragraph (l)(2)(iii) and (m)(3).

■ e. Adding paragraph (m)(4).

■ f. Revising paragraphs (p)(3) and (p)(4).

The revisions and additions read as follows:

§ 86.010–18 On-board Diagnostics for engines used in applications greater than 14,000 pounds GVWR.

(a) * * *

(5) Engines families that we determine conform to the requirements of this paragraph (a)(5) are deemed to comply with the requirements of this section, irrespective of complete conformance with the provisions of paragraphs (b) through (l) of this section.

(i) A manufacturer may demonstrate how the OBD system they have designed to comply with California OBD requirements for engines used in applications greater than 14,000 pounds also complies with the intent of the provisions of paragraphs (b) through (l) of this section. To make use of this alternative, the manufacturer must demonstrate to the Administrator how the OBD system they intend to certify meets the intent behind all of the requirements of this section, where applicable (*e.g.,* paragraph (h) of this section would not apply for a diesel fueled/CI engine). Furthermore, if making use of this alternative, the manufacturer must comply with the specific certification documentation requirements of paragraph (m)(3) of this section.

(ii) A manufacturer may demonstrate how the OBD system of a new engine family is sufficiently equivalent to the OBD system of a previously certified engine family (including engine families previously certified under paragraph (a)(5)(i)) of this section to demonstrate that the new engine family complies with the intent of the provisions of paragraphs (b) through (l) of this section. To make use of this alternative, manufacturers must demonstrate to the Administrator how the OBD systems they intend to certify meet the intent behind all the requirements of this section, where applicable. For example, paragraph (h) of this section would not apply for a diesel-fueled engine. Furthermore, if making use of this alternative, the manufacturer must comply with the specific certification documentation requirements of paragraph (m)(4) of this section.

* * * * *

(g)* * *

(2) * * *

(ii) * * *

(B) For model years 2013 and later, on engines equipped with sensors that can detect combustion or combustion quality (*e.g.,* for use in engines with homogeneous charge compression ignition (HCCI) control systems), the OBD system must detect a misfire malfunction when the percentage of misfire is 5 percent or greater.

(iii) * * *

(C) For model years 2013 through 2018, on engines equipped with sensors that can detect combustion or combustion quality, the OBD system must monitor continuously for engine misfire when positive torque is between 20 and 75 percent of peak torque, and engine speed is less than 75 percent of maximum engine speed. If a monitoring system cannot detect all misfire patterns under all required engine speed and load conditions, the manufacturer may request that the Administrator approve the monitoring system nonetheless. In evaluating the manufacturer's request, the Administrator will consider the following factors: The magnitude of the region(s) in which misfire detection is limited; the degree to which misfire detection is limited in the region(s) (*i.e.,* the probability of detection of misfire events); the frequency with which said region(s) are expected to be encountered in-use; the type of misfire patterns for which misfire detection is troublesome; and demonstration that the monitoring technology employed is not inherently incapable of detecting misfire under required conditions (*i.e.,* compliance can be achieved on other engines). The evaluation will be based on the following misfire patterns: Equally spaced misfire occurring on randomly selected cylinders; single cylinder continuous misfire; and, paired cylinder (cylinders firing at the same crank angle) continuous misfire.

(D) For 20 percent of 2019 model year, 50 percent of 2020 model, and 100 percent of 2021 model year diesel engines (percentage based on the manufacturer's projected sales volume of all diesel engines subject to this regulation) equipped with sensors that can detect combustion or combustion quality, the OBD system must monitor continuously for engine misfire under all positive torque engine speed conditions except within the following range: The engine operating region bound by the positive torque line (*i.e.,* engine torque with transmission in neutral) and the two following points: Engine speed of 50 percent of maximum engine speed with the engine torque at the positive torque line, and 100 percent of the maximum engine speed with the engine torque at 10 percent of peak torque above the positive torque line. If a monitoring system cannot detect all misfire patterns under all required engine speed and load conditions, the manufacturer may request that the Administrator approve the monitoring system nonetheless. In evaluating the manufacturer's request, the Administrator will consider the following factors: The magnitude of the region(s) in which misfire detection is limited; the degree to which misfire detection is limited in the region(s) (*i.e.,* the probability of detection of misfire events); the frequency with which said region(s) are expected to be encountered in-use; the type of misfire patterns for which misfire detection is troublesome; and demonstration that the monitoring technology employed is not inherently incapable of detecting misfire under required conditions (*i.e.,* compliance can be achieved on other engines). The evaluation will be based on the following misfire patterns: Equally spaced misfire occurring on randomly selected cylinders; single cylinder continuous misfire; and, paired cylinder (cylinders firing at the same crank angle) continuous misfire.

* * * * *

(l) * * *

(2) * * *

(iii) *For model years 2013 and later.* (A) A manufacturer certifying one to five engine families in a given model year must provide emissions test data for a single test engine from one engine rating. A manufacturer certifying six to ten engine families in a given model year must provide emissions test data for a single test engine from two different engine ratings. A manufacturer certifying eleven or more engine families in a given model year must provide emissions test data for a single test engine from three different engine ratings. A manufacturer may forego submittal of test data for one or more of these test engines if data have been submitted previously for all of the engine ratings and/or if all requirements for certification carry-over from one model year to the next are satisfied, and/or if differences from previously submitted engines are not relevant to emissions or diagnostic demonstration (such as changes to supported data stream parameters or changes to monitors not associated with demonstrating or enabling demonstrated emission threshold diagnostics). For purposes of this paragraph (l)(2)(iii), you may ask to exclude special families (such as California variants) from your count of engine families.

* * * * *

(m) * * *

(3) In addition to the documentation required by paragraphs (m)(1) and (2) of this section, a manufacturer making use of paragraph (a)(5)(i) of this section must submit the following information with their application for certification:

(i) A detailed description of how the OBD system meets the intent of this section.

(ii) A detailed description of why the manufacturer has chosen not to design the OBD system to meet the requirements of this section and has instead designed the OBD system to meet the applicable California OBD requirements.

(iii) A detailed description of any deficiencies granted by the California staff and any concerns raised by California staff. A copy of a California Executive Order alone will not be considered acceptable toward meeting this requirement. This description shall also include, to the extent feasible, a plan with timelines for resolving deficiencies and/or concerns.

(4) In addition to the documentation required by paragraphs (m)(1) and (2) of this section, a manufacturer making use of paragraph (a)(5)(ii) of this section must submit the following information with their application for certification:

(i) A detailed description of how the OBD system meets the intent of this section.

(ii) A detailed description of changes made from the previously certified OBD system.

* * * * *

(p) * * *

(3) *For model years 2016 through 2018.* (i) On the engine ratings tested according to paragraph (l)(2)(iii) of this section, the certification emissions thresholds shall apply in-use.

(ii) On the manufacturer's remaining engine ratings, separate in-use emissions thresholds shall apply. These thresholds are determined by doubling the applicable thresholds as shown in Table 1 of paragraph (g) of this section and Table 2 of paragraph (h) of this section. The resultant thresholds apply only in-use and do not apply for certification or selective enforcement auditing.

(iii) For monitors subject to meeting the minimum in-use monitor performance ratio of 0.100 in paragraph (d)(1)(ii) of this section, the OBD system shall not be considered noncompliant unless a representative sample indicates the in-use ratio is below 0.088 except for filtering performance monitors for PM filters (paragraph (g)(8)(ii)(A) of this section) and missing substrate monitors (paragraph (g)(8)(ii)(D) of this section) for which the OBD system shall not be considered noncompliant unless a representative sample indicates the in-use ratio is below 0.050.

(iv) An OBD system shall not be considered noncompliant solely due to a failure or deterioration mode of a monitored component or system that could not have been reasonably foreseen to occur by the manufacturer.

(4) *For model years 2019 and later.* (i) On all engine ratings, the certification emissions thresholds shall apply in-use.

(ii) For monitors subject to meeting the minimum in-use monitor performance ratio of 0.100 in paragraph (d)(1)(ii) of this section, the OBD system shall not be considered noncompliant unless a representative sample indicates the in-use ratio is below 0.088.

(iii) An OBD system shall not be considered noncompliant solely due to a failure or deterioration mode of a monitored component or system that the manufacturer could not have reasonably foreseen.

* * * * *

■ 51. Section 86.113–04 is amended by revising paragraph (a)(1) to read as follows:

§ 86.113–04 Fuel specifications.

* * * * *

(a) * * *

(1) Gasoline meeting the following specifications, or substantially equivalent specifications approved by the Administrator, must be used for exhaust and evaporative testing:

Table 1 to §86.113-04–Test fuel specifications for gasoline without ethanol

Item	Regular	Reference Procedure[1]
Research octane, Minimum[2]	93	ASTM D2699 ASTM D2700
Octane sensitivity[2]	7.5	
Distillation Range (°F): Evaporated initial boiling point[3] 10% evaporated 50% evaporated 90% evaporated Evaporated final boiling point	 75 – 95 120 - 135 200 - 230 300 - 325 415 Maximum	ASTM D86
Total Aromatic Hydrocarbon (vol %)	35% Maximum	ASTM D1319 or ASTM D5769
Olefins (vol %)[4]	10% Maximum	ASTM D1319 or ASTM D6550
Lead, g/gallon (g/liter), Maximum	0.050 (0.013)	ASTM D3237
Phosphorous, g/gallon (g/liter), Maximum	0.005 (0.0013)	ASTM D3231
Total sulfur, wt. %[5]	0.0015 – 0.008	ASTM D2622
Dry Vapor Pressure Equivalent (*DVPE*), kPa (psi)[6]	60.0-63.4 (8.7-9.2)	ASTM D5191

[1] Incorporated by reference, see §86.1.

[2] Octane specifications are optional for manufacturer testing.

[3] For testing at altitudes above 1,219 m (4000 feet), the specified range is 75-105° F.

[4]ASTM D6550 prescribes measurement of olefin concentration in mass %. Multiply this result by 0.857 and round to the first decimal place to determine the olefin concentration in volume %.

[5] Sulfur concentration will not exceed 0.0045 weight percent for EPA testing.

[6] For testing unrelated to evaporative emission control, the specified range is 54.8-63.7 kPa (8.0-9.2 psi). For testing at altitudes above 1,219 m (4000 feet), the specified range is 52.0-55.4 kPa (7.6-8.0 psi). Calculate dry vapor pressure equivalent, *DVPE*, based on the measured total vapor pressure, p_T, using the following equation: $DVPE$ (kPa) = $0.956 \cdot p_T - 2.39$ (or $DVPE$ (psi) = $0.956 \cdot p_T - 0.347$). *DVPE* is intended to be equivalent to Reid Vapor Pressure using a different test method.

* * * * *

■ 52. Section 86.129–00 is amended by revising paragraph (f)(1)(ii)(C) to read as follows:

§ 86.129–00 Road load power, test weight, and inertia weight class determination.

* * * * *

(f)(1) * * *

(ii) * * *

(C) Regardless of other requirements in this section relating to the testing of HLDTs, for Tier 2 and Tier 3 HLDTs, the test weight basis for FTP and SFTP testing (both US06 and SC03), if applicable, is the vehicle curb weight plus 300 pounds. For MDPVs certified to standards in bin 11 in Tables S04–1 and 2 in § 86.1811–04, the test weight basis must be adjusted loaded vehicle weight (ALVW) as defined in this part.

* * * * *

■ 53. Section 86.130–96 is amended by revising paragraph (a) to read as follows:

§ 86.130–96 Test sequence; general requirements.

* * * * *

(a)(1) *Gasoline- and methanol-fueled vehicles.* The test sequence shown in Figure 1 of 40 CFR 1066.801 shows the steps encountered as the test vehicle undergoes the procedures subsequently described to determine conformity with the standards set forth. The full three-diurnal sequence depicted in Figure 1 of 40 CFR 1066.801 tests vehicles for all sources of evaporative emissions. The supplemental two-diurnal test sequence is designed to verify that vehicles sufficiently purge their evaporative canisters during the exhaust emission test. Sections 86.132–96, 86.133–96 and 86.138–96 describe the separate specifications of the supplemental two-diurnal test sequence.

(2) *Gaseous-fueled vehicles.* The test sequence shown in figure Figure 1 of 40 CFR 1066.801 shows the steps encountered as the test vehicle undergoes the procedures subsequently described to determine conformity with the standards set forth, with the exception that the fuel drain and fill and precondition canister steps are not required for gaseous-fueled vehicles. In addition, the supplemental two-diurnal test and the running loss test are not required.

* * * * *

■ 54. Section 86.213 is amended by revising paragraph (a)(2) to read as follows:

§ 86.213 Fuel specifications.

(a) * * *

(2) You may use the test fuel specified in this paragraph (a)(2) for vehicles that are not yet subject to exhaust testing with an ethanol-blend test fuel under § 86.113. Manufacturers may certify based on this fuel using carryover data until testing with the ethanol-blend test fuel is required. The following specifications apply for gasoline test fuel without ethanol:

TABLE 1 OF § 86.213–COLD TEMPERATURE TEST FUEL SPECIFICATIONS FOR GASOLINE WITHOUT ETHANOL

Item	Regular	Premium	Reference Procedure[1]
(RON+MON)/2[2]	87.8±0.3	92.3±0.5	ASTM D2699 ASTM D2700
Sensitivity[3]	7.5	7.5	ASTM D2699 ASTM D2700
Distillation Range (°F): Evaporated initial boiling point 10% evaporated 50% evaporated 90% evaporated Evaporated final boiling point	 76 – 96 98 - 118 179 - 214 316 - 346 413 Maximum	 76 – 96 105 - 125 195 - 225 316 - 346 413 Maximum	ASTM D86
Total Aromatic Hydrocarbon (vol %)	26.4±4.0	32.0±4.0	ASTM D1319 or ASTM D5769
Olefins (vol %)[4]	12.5±5.0	10.5±5.0	ASTM D1319 or ASTM D6550
Lead, g/gallon	0.01, Maximum	0.01, Maximum	ASTM D3237
Phosphorous, g/gallon	0.005 Maximum	0.005 Maximum	ASTM D3231
Total sulfur, wt. %[3]	0.0015 – 0.008	0.0015 – 0.008	ASTM D2622
RVP, psi	11.5±0.3	11.5±0.3	ASTM D5191

[1] Incorporated by reference, see § 86.1.

[2] Octane specifications are optional for manufacturer testing. The premium fuel specifications apply for vehicles designed to use high-octane premium fuel.

[3] Sulfur concentration will not exceed 0.0045 weight percent for EPA testing.

[4] ASTM D6550 prescribes measurement of olefin concentration in mass %. Multiply this result by 0.857 and round to the first decimal place to determine the olefin concentration in volume %.

* * * * *

§ 86.401–97 [Removed]

■ 55. Remove § 86.401–97.

■ 56. Amend § 86.408–78 by adding paragraphs (c) and (d) to read as follows:

§ 86.408–78 General standards; increase in emissions; unsafe conditions.

* * * * *

(c) If a new motorcycle is designed to require manual adjustment to compensate for changing altitude, the manufacturer must include the appropriate instructions in the application for certification. EPA will review the instructions to ensure that properly adjusted motorcycles will meet emission standards at both low altitude and high altitude.

(d) An action to install parts, modify engines, or perform other adjustments to compensate for changing altitude is not prohibited under 42 U.S.C. 7522 as long as it is done consistent with the manufacturer's instructions.

§ 86.413–78 [Removed]

■ 57. Remove § 86.413–78.

■ 58. Amend § 86.419–2006 by revising paragraph (b) introductory text to read as follows:

§ 86.419–2006 Engine displacement, motorcycle classes.

* * * * *

(b) Motorcycles will be divided into classes and subclasses based on engine displacement.

* * * * *

■ 59. Amend § 86.427–78 by revising paragraph (a)(1) to read as follows:

§ 86.427–78 Emission tests.

(a)(1) Each test vehicle shall be driven with all emission control systems installed and operating for the following total test distances, or for such lesser distances as the Administrator may agree to as meeting the objectives of this procedure. (See § 86.419 for class explanation.)

Displacement class	Total test distance (kilometers)	Minimum test distance (kilometers)	Minimum number of tests
I–A	6,000	2,500	4
I–B	6,000	2,500	4
II	9,000	2,500	4
III	15,000	3,500	4

* * * * *

■ 60. Amend § 86.435–78 by revising paragraph (b)(1) to read as follows:

§ 86.435–78 Extrapolated emission values.

* * * * *

(b) * * *

(1) If the useful life emissions are at or below the standards, certification will be granted.

* * * * *

■ 61. Amend § 86.436–78 by revising paragraph (d) to read as follows:

§ 86.436–78 Additional service accumulation.

* * * * *

(d) To qualify for certification:

(1) The full life emission test results must be at or below the standards, and

(2) The deterioration line must be below the standard at the minimum test distance and the useful life, or all points used to generate the line, must be at or below the standard.

* * * * *

■ 62. Amend § 86.513 by revising paragraphs (a)(1) and (a)(3) to read as follows:

§ 86.513 Fuel and engine lubricant specifications.

(a) *Gasoline.* (1) Use gasoline meeting the following specifications for exhaust and evaporative emission testing:

TABLE 1 OF § 86.513—GASOLINE TEST FUEL SPECIFICATIONS

Item	Value	Procedure[1]
Distillation Range:		
1. Initial boiling point, °C 2. 10% point, °C 3. 50% point, °C 4. 90% point, °C 5. End point, °C	23.9—35.0 [2] 48.9—57.2 93.3—110.0 148.9—162.8 212.8 maximum	ASTM D86
Total aromatic hydrocarbon, volume %	35 maximum	ASTM D1319 or ASTM D5769
Olefins, volume %[3]	10 maximum	ASTM D1319 or ASTM D6550
Lead (organic), g/liter	0.013 maximum	ASTM D3237
Phosphorous, g/liter	0.0013 maximum	ASTM D3231
Sulfur, weight %	0.008 maximum	ASTM D2622
Dry Vapor Pressure Equivalent (*DVPE*), kPa	55.2 to 63.4 [4]	ASTM D5191

[1] Incorporated by reference, see § 86.1.

[2] For testing at altitudes above 1,219 m, the specified initial boiling point range is (23.9 to 40.6) °C.

[3] ASTM D6550 prescribes measurement of olefin concentration in mass %. Multiply this result by 0.857 and round to the first decimal place to determine the olefin concentration in volume %.

[4] For testing at altitudes above 1,219 m, the specified volatility range is 52 to 55 kPa. Calculate dry vapor pressure equivalent, *DVPE*, based on the measured total vapor pressure, p_T, using the following equation: $DVPE$ (kPa) = $0.956 \cdot p_T - 2.39$ (or $DVPE$ (psi) = $0.956 \cdot p_T - 0.347$). *DVPE* is intended to be equivalent to Reid Vapor Pressure using a different test method.

* * * * *

(3) Manufacturers may alternatively use ethanol-blended gasoline meeting the specifications described in 40 CFR 1065.710(b) for general testing without our advance approval. Manufacturers using the ethanol-blended fuel for certifying a given engine family may also use it for any testing for that engine family under this part. If manufacturers use the ethanol-blended fuel for certifying a given engine family, EPA may use the ethanol-blended fuel or the neat gasoline test fuel specified in this section for that engine family. Manufacturers may also request to use fuels meeting alternate specifications as described in 40 CFR 1065.701(b).

* * * * *

■ 63. Revise § 86.531–78 to read as follows:

§ 86.531–78 Vehicle preparation.

(a) The manufacturer shall provide additional fittings and adapters, as required by the Administrator, to accommodate a fuel drain at the lowest point possible in the tank(s) as installed on the vehicle, and to provide for exhaust sample collection.

(b) Connect the motorcycle's exhaust system to the analyzer for all exhaust emission measurements. Seal the exhaust system as needed to ensure that any remaining leaks do not affect the demonstration that the motorcycle complies with standards. Sealing all known leaks is recommended.

■ 64. Revise § 86.1362 to read as follows:

§ 86.1362 Steady-state testing with a ramped-modal cycle.

(a) This section describes how to test engines under steady-state conditions. Perform ramped-modal testing as described in 40 CFR 1036.505 and 40 CFR part 1065, except as specified in this section.

(b) Measure emissions by testing the engine on a dynamometer with the following ramped-modal duty cycle to determine whether it meets the applicable steady-state emission standards:

RMC mode	Engine testing			Powertrain testing				CO_2 weighting (percent) [5]
	Time in mode (seconds)	Engine speed [1 2]	Torque (percent) [2 3]	Vehicle speed (mi/hr) [4]	Road-grade coefficients [4]			
					a	*b*	*c*	
1a Steady-state	170	Warm Idle	0	Warm Idle	0	0	0	6
1b Transition	20	Linear Transition	Linear Transition	Linear Transition	5.6E–6	–4.6E–3	–9.1E+0	
2a Steady-state	173	A	100	53.38	–1.6E–6	691.3E–6	2.1E+0	9
2b Transition	20	Linear Transition	Linear Transition	Linear Transition	0	0	0	
3a Steady-state	219	B	50	65.00	–12.8E–6	10.2E–3	–1.6E+0	10
3b Transition	20	B	Linear Transition	65.00	0	0	0	
4a Steady-state	217	B	75	65.00	–10.2E–6	7.8E–3	–268.9E–3	10
4b Transition	20	Linear Transition	Linear Transition	Linear Transition	–8.8E–6	6.7E–3	2.2E+0	
5a Steady-state	103	A	50	53.38	–8.0E–6	6.2E–3	–623.0E–3	12
5b Transition	20	A	Linear Transition	53.38	–5.6E–6	4.4E–3	92.1E–3	
6a Steady-state	100	A	75	53.38	–5.0E–6	3.5E–3	712.4E–3	12
6b Transition	20	A	Linear Transition	53.38	–6.9E–6	5.4E–3	–473.1E–3	
7a Steady-state	103	A	25	53.38	–11.1E–6	8.8E–3	–2.0E+0	12
7b Transition	20	Linear Transition	Linear Transition	Linear Transition	–8.6E–6	6.9E–3	–3.1E+0	
8a Steady-state	194	B	100	65.00	–7.4E–6	5.5E–3	798.2E–3	9
8b Transition	20	B	Linear Transition	65.00	–13.2E–6	10.1E–3	–1.2E+0	
9a Steady-state	218	B	25	65.00	–16.9E–6	13.6E–3	–3.2E+0	9
9b Transition	20	Linear Transition	Linear Transition	Linear Transition	–16.7E–6	13.6E–3	–5.2E+0	
10a Steady-state	171	C	100	77.80	–16.5E–6	13.1E–3	–1.3E+0	2
10b Transition	20	C	Linear Transition	77.80	–18.5E–6	15.4E–3	–2.9E+0	
11a Steady-state	102	C	25	77.80	–24.7E–6	20.2E–3	–5.0E+0	1
11b Transition	20	C	Linear Transition	77.80	–22.1E–6	17.9E–3	–3.8E+0	
12a Steady-state	100	C	75	77.80	–19.2E–6	15.5E–3	–2.5E+0	1
12b Transition	20	C	Linear Transition	77.80	–20.4E–6	16.5E–3	–3.1E+0	
13a Steady-state	102	C	50	77.80	–21.8E–6	17.7E–3	–3.7E+0	1
13b Transition	20	Linear Transition	Linear Transition	Linear Transition	–11.8E–6	7.6E–3	17.6E+0	
14 Steady-state	168	Warm Idle	0	Warm Idle	0	0	0	6

[1] Engine speed terms are defined in 40 CFR part 1065.
[2] Advance from one mode to the next within a 20 second transition phase. During the transition phase, command a linear progression from the settings of the current mode to the settings of the next mode.
[3] The percent torque is relative to maximum torque at the commanded engine speed.
[4] See 40 CFR 1036.505(c) for a description of powertrain testing with the ramped-modal cycle, including the equation that uses the road-grade coefficients.
[5] Use the specified weighting factors to calculate composite emission results for CO_2 as specified in 40 CFR 1036.501.

Subpart P—[Removed and Reserved]

■ 65. Remove and reserve Subpart P.

Subpart Q—[Removed and Reserved]

■ 66. Remove and reserve Subpart Q.

■ 67. Amend § 86.1803–01 by revising the definitions for ''Heavy-duty vehicle'' and ''Light-duty truck'' to read as follows:

§ 86.1803–01 Definitions.

* * * * *

Heavy-duty vehicle means any complete or incomplete motor vehicle rated at more than 8,500 pounds GVWR. *Heavy-duty vehicle* also includes incomplete vehicles that have a curb weight above 6,000 pounds or a basic vehicle frontal area greater than 45 square feet. Note that MDPVs are heavy-duty vehicles that are in many cases subject to requirements that apply for light-duty trucks.

* * * * *

Light-duty truck means any motor vehicle that is not a heavy-duty vehicle, but is:

(1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle; or

(2) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or

(3) Available with special features enabling off-street or off-highway operation and use.

* * * * *

■ 68. Amend § 86.1810–17 by adding paragraph (j) to read as follows:

§ 86.1810–17 General requirements.

* * * * *

(j) Small-volume manufacturers that modify a vehicle already certified by a different company may recertify that vehicle under this subpart S based on the vehicle supplier's compliance with fleet average standards for criteria exhaust emissions and evaporative emissions, as follows:

(1) The recertifying manufacturer must certify the vehicle at bin levels and family emission limits that are the same as or more stringent than the corresponding bin levels and family emission limits for the vehicle supplier.

(2) The recertifying manufacturer must meet all the standards and requirements described in this subpart S, except for the fleet average standards for criteria exhaust emissions and evaporative emissions.

(3) The vehicle supplier must send the small-volume manufacturer a written statement accepting responsibility to include the subject vehicles in the vehicle supplier's fleet average calculations.

(4) The small-volume manufacturer must describe in the application for certification how the two companies are working together to demonstrate compliance for the subject vehicles. The application must include the statement from the vehicle supplier described in paragraph (j)(3) of this section.

■ 69. Amend § 86.1811–17 by revising paragraph (b)(8)(iii)(C) to read as follows:

§ 86.1811–17 Exhaust emission standards for light-duty vehicles, light-duty trucks and medium-duty passenger vehicles.

* * * * *

(b) * * *

(8) * * *

(iii) * * *

(C) Vehicles must comply with the Tier 2 SFTP emission standards for NMHC + NO_X and CO for 4,000-mile testing that are specified in § 86.1811–04(f)(1) if they are certified to transitional Bin 85 or Bin 110 standards, or if they are certified based on a fuel without ethanol, or if they are not certified to the Tier 3 PM standard. Note that these standards apply under this section for alternative fueled vehicles, for flexible fueled vehicles when operated on a fuel other than gasoline or diesel fuel, and for MDPVs, even though these vehicles were not subject to the SFTP standards in the Tier 2 program.

* * * * *

■ 70. Amend § 86.1813–17 by revising the introductory text and paragraph (a)(2)(i) to read as follows:

§ 86.1813–17 Evaporative and refueling emission standards.

Vehicles must meet evaporative and refueling emission standards as specified in this section. These emission standards apply for heavy duty vehicles above 14,000 pounds GVWR as specified in § 86.1801. These emission standards apply for total hydrocarbon equivalent (THCE) measurements using the test procedures specified in subpart B of this part, as appropriate. Note that § 86.1829 allows you to certify without testing in certain circumstances. These evaporative and refueling emission standards do not apply for electric vehicles, fuel cell vehicles, or diesel-fueled vehicles, except as specified in paragraph (b) of this section. Unless otherwise specified, MDPVs are subject to all the same provisions of this section that apply to LDT4.

(a) * * *

(2) * * *

(i) The emission standard for the sum of diurnal and hot soak measurements from the two-diurnal test sequence and the three-diurnal test sequence is based on a fleet average in a given model year. You must specify a family emission limit (FEL) for each evaporative family. The FEL serves as the emission standard for the evaporative family with respect to all required diurnal and hot soak testing. Calculate your fleet-average emission level as described in § 86.1860 based on the FEL that applies for low-altitude testing to show that you meet the specified standard. For multi-fueled vehicles, calculate fleet-average emission levels based only on emission levels for testing with gasoline. You may generate emission credits for banking and trading and you may use banked or traded credits for demonstrating compliance with the diurnal plus hot soak emission standard for vehicles required to meet the Tier 3 standards, other than gaseous-fueled vehicles, as described in § 86.1861 starting in model year 2017. You comply with the emission standard for a given model year if you have enough credits to show that your fleet-average emission level is at or below the applicable standard. You may exchange credits between or among evaporative families within an averaging set as described in § 86.1861. Separate diurnal plus hot soak emission standards apply for each evaporative/refueling emission family as shown for high-altitude conditions. The sum of diurnal and hot soak measurements may not exceed the following Tier 3 standards:

* * * * *

■ 71. Amend § 86.1817–05 by revising paragraph (a)(1) to read as follows:

§ 86.1817–05 Complete heavy-duty vehicle averaging, trading, and banking program.

(a) * * *

(1) Complete heavy-duty vehicles eligible for the NO_X averaging, trading and banking program are described in the applicable emission standards section of this subpart. Participation in this averaging, trading, and banking program is voluntary.

* * * * *

■ 72. Amend § 86.1818–12 by revising paragraph (d) to read as follows:

§ 86.1818–12 Greenhouse gas emission standards for light-duty vehicles, light-duty trucks, and medium-duty passenger vehicles.

* * * * *

(d) *In-use CO_2 exhaust emission standards.* The in-use CO_2 exhaust emission standard shall be the combined city/highway carbon-related exhaust emission value calculated for the appropriate vehicle carline/subconfiguration according to the provisions of § 600.113–12(g)(4) of this chapter adjusted by the deterioration factor from § 86.1823–08(m). Multiply the result by 1.1 and round to the nearest whole gram per mile. For in-use vehicle carlines/subconfigurations for which a combined city/highway carbon-related exhaust emission value was not determined under § 600.113–12(g)(4) of this chapter, the in-use CO_2 exhaust emission standard shall be the combined city/highway carbon-related exhaust emission value calculated according to the provisions of § 600.208 of this chapter for the vehicle model type (except that total model year production data shall be used instead of sales projections) adjusted by the deterioration factor from § 86.1823–08(m). Multiply the result by 1.1 and round to the nearest whole gram per mile. For vehicles that are capable of operating on multiple fuels, except plug-in hybrid electric vehicles, a separate in-use standard shall be determined for each fuel that the vehicle is capable of operating on. These standards apply to in-use testing performed by the manufacturer pursuant to regulations at §§ 86.1845 and 86.1846 and to in-use testing performed by EPA.

* * * * *

■ 73. Amend § 86.1838–01 by revising paragraph (c)(2)(iii) to read as follows:

§ 86.1838–01 Small-volume manufacturer certification procedures.

* * * * *

(c) * * *

(2) * * *

(iii) The provisions of § 86.1845–04(c)(2) that require one vehicle of each test group during high mileage in-use verification testing to have a minimum odometer mileage of 75 percent of the full useful life mileage do not apply.

* * * * *

■ 74. Amend § 86.1868–12 by revising paragraph (g) introductory text and adding paragraph (g)(5) to read as follows:

§ 86.1868–12 CO_2 credits for improving the efficiency of air conditioning systems.

* * * * *

(g) *AC17 validation testing and reporting requirements.* For 2020 and later model years, manufacturers must validate air conditioning credits by using the AC17 Test Procedure as follows:

* * * * *

(5) AC17 testing requirements apply as follows for electric vehicles and plug-in hybrid electric vehicles:

(i) Manufacturers may omit AC17 testing for electric vehicles. Electric vehicles may qualify for air conditioning efficiency credits based on identified technologies, without testing. The application for certification must include a detailed description of the vehicle's air conditioning system and identify any technology items eligible for air conditioning efficiency credits. Include additional supporting information to justify the air conditioning credit for each technology.

(ii) The provisions of paragraph (g)(5)(i) of this section also apply for plug-in hybrid electric vehicles if they have an all electric range of at least 60 miles after adjustment to reflect actual

in-use driving conditions (see 40 CFR 600.311(j)), and they do not rely on the engine to cool the vehicle's cabin for the ambient and driving conditions represented by the AC17 test.

(iii) If AC17 testing is required for plug-in hybrid electric vehicles, perform this testing in charge-sustaining mode.

* * * * *

■ 75. Part 88 is revised to read as follows:

PART 88—CLEAN-FUEL VEHICLES

Sec.
88.1 General applicability.
88.2 through 88.3 [Reserved]

Authority: 42 U.S.C. 7410, 7418, 7581, 7582, 7583, 7584, 7586, 7588, 7589, 7601(a).

§ 88.1 General applicability.

(a) The Clean Air Act includes provisions intended to promote the development and sale of clean-fuel vehicles (see 42 U.S.C. 7581–7589). This takes the form of credit incentives for State Implementation Plans. The specified clean-fuel vehicle standards to qualify for these credits are now uniformly less stringent than the emission standards that apply for new vehicles and new engines under 40 CFR part 86 and part 1036.

(b) The following provisions apply for purposes of State Implementation Plans that continue to reference the Clean Fuel Fleet Program:

(1) Vehicles and engines certified to current emission standards under 40 CFR part 86 or part 1036 are deemed to also meet the Clean Fuel Fleet standards as Ultra Low-Emission Vehicles.

(2) Vehicles and engines meeting requirements as specified in paragraph (a)(1) of this section with a fuel system designed to not vent fuel vapors to the atmosphere are also deemed to meet the Clean Fuel Fleet standards as Inherently Low-Emission Vehicles. The applies for vehicles using diesel fuel, liquefied petroleum gas, or compressed natural gas. It does not apply for vehicles using gasoline, ethanol, methanol, or liquefied natural gas.

(3) The following types of vehicles qualify as Zero Emission Vehicles:

(i) Electric vehicles (see 40 CFR 86.1803).

(ii) Any other vehicle with a fuel that contains no carbon or nitrogen compounds, that has no evaporative emissions, and that burns without forming oxides of nitrogen, carbon monoxide, formaldehyde, particulate matter, or hydrocarbon compounds. This applies equally for all engines installed on the vehicle.

§ § 88.2 through 88.3 [Reserved]

■ 76. Part 89 is revised to read as follows:

PART 89—CONTROL OF EMISSIONS FROM NEW AND IN-USE NONROAD COMPRESSION-IGNITION ENGINES

Sec.
89.1 Applicability.
89.2 through 89.3 [Reserved]

Authority: 42 U.S.C. 7401–7671q.

§ 89.1 Applicability.

The Environmental Protection Agency adopted emission standards for model year 1996 and later nonroad compression-ignition engines under this part 89. EPA has migrated regulatory requirements for these engines to 40 CFR part 1039, with additional testing and compliance provisions in 40 CFR part 1065 and part 1068. The Tier 1, Tier 2, and Tier 3 standards originally adopted in this part 89 are identified in 40 CFR part 1039, Appendix I. See 40 CFR 1039.1 for information regarding the timing of the transition to 40 CFR part 1039, and for information regarding regulations that continue to apply for engines that manufacturers originally certified or otherwise produced under this part 89.

§ § 89.2 through 89.3 [Reserved]

■ 77. Part 90 is revised to read as follows:

PART 90—CONTROL OF EMISSIONS FROM NONROAD SPARK-IGNITION ENGINES AT OR BELOW 19 KILOWATTS

Sec.
90.1 Applicability.
90.2 through 90.3 [Reserved]

Authority: 42 U.S.C. 7401–7671q.

§ 90.1 Applicability.

The Environmental Protection Agency adopted emission standards for model year 1997 and later nonroad spark-ignition engines below 19 kW under this part 90. EPA has migrated regulatory requirements for these engines to 40 CFR part 1054, with additional testing and compliance provisions in 40 CFR part 1065 and part 1068. The Phase 1 and Phase 2 standards originally adopted in this part 90 are identified in 40 CFR part 1054, Appendix I. See 40 CFR 1054.1 for information regarding the timing of the transition to 40 CFR part 1054, and for information regarding regulations that continue to apply for engines that manufacturers originally certified or otherwise produced under this part 90.1

§ § 90.2 through 90.3 [Reserved]

■ 78. Part 91 is revised to read as follows:

PART 91—CONTROL OF EMISSIONS FROM MARINE SPARK-IGNITION ENGINES

Sec.
91.1 Applicability.
91.2 through 91.3 [Reserved]

Authority: 42 U.S.C. 7401–7671q.

§ 91.1 Applicability.

The Environmental Protection Agency adopted emission standards for model year 1998 and later marine spark-ignition engines under this part 91, except that the standards of this part did not apply to sterndrive/inboard engines. EPA has migrated regulatory requirements for these engines to 40 CFR part 1045, with additional testing and compliance provisions in 40 CFR part 1065 and part 1068. The standards originally adopted in this part 91 are identified in 40 CFR part 1045, Appendix I. See 40 CFR 1045.1 for information regarding the timing of the transition to 40 CFR part 1045, and for information regarding regulations that continue to apply for engines that manufacturers originally certified or otherwise produced under this part 91.

§ § 91.2 through 91.3 [Reserved]

■ 79. Part 92 is revised to read as follows:

PART 92—CONTROL OF AIR POLLUTION FROM LOCOMOTIVES AND LOCOMOTIVE ENGINES

Sec.
92.1 Applicability.
92.2 through 92.3 [Reserved]

Authority: 42 U.S.C. 7401–7671q.

§ 92.1 Applicability.

The Environmental Protection Agency first adopted emission standards for freshly manufactured and remanufactured locomotives under this part 92 in 1998. EPA has migrated regulatory requirements for these engines to 40 CFR part 1033, with additional testing and compliance provisions in 40 CFR part 1065 and part 1068. The Tier 0, Tier 1, and Tier 2 standards originally adopted in this part 92 are identified in 40 CFR part 1033, Appendix I. See 40 CFR 1033.1 for information regarding the timing of the transition to 40 CFR part 1033, and for information regarding regulations that continue to apply for engines that manufacturers originally certified or otherwise produced or remanufactured under this part 92. Emission standards

started to apply for locomotive and locomotive engines if they were—

(a) Manufactured on or after January 1, 2000;

(b) Manufactured on or after January 1, 1973 and remanufactured on or after January 1, 2000; or

(c) Manufactured before January 1, 1973 and upgraded on or after January 1, 2000.

§ § 92.2 through 92.3 [Reserved]

■ 80. Part 94 is revised to read as follows:

PART 94—CONTROL OF EMISSIONS FROM MARINE COMPRESSION-IGNITION ENGINES

Sec.
94.1 Applicability.
94.2 through 94.3 [Reserved]

Authority: 42 U.S.C. 7401–7671q.

§ 94.1 Applicability.

The Environmental Protection Agency adopted emission standards for model year 2004 and later marine compression-ignition engines under this part 94. EPA has migrated regulatory requirements for these engines to 40 CFR part 1042, with additional testing and compliance provisions in 40 CFR part 1065 and part 1068. The Tier 1 and Tier 2 standards originally adopted in this part 94 are identified in 40 CFR part 1042, Appendix I. See 40 CFR 1042.1 for information regarding the timing of the transition to 40 CFR part 1042, and for information regarding regulations that continue to apply for engines that manufacturers originally certified or otherwise produced under this part 94.

§ § 94.2 through 94.3 [Reserved]

PART 1027—FEES FOR VEHICLE AND ENGINE COMPLIANCE PROGRAMS

■ 81. The authority statement for part 1027 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 82. The heading for part 1027 is revised to read as set forth above.

■ 83. Amend § 1027.101 by:

■ a. Revising paragraph (a); and

■ b. Removing and reserving paragraph (b).

The revision reads as follows:

§ 1027.101 To whom do these requirements apply?

(a) This part prescribes fees manufacturers must pay for activities related to EPA's motor vehicle and engine compliance program (MVECP). This includes activities related to approving certificates of conformity and performing tests and taking other steps to verify compliance with emission standards. You must pay fees as described in this part if you are a manufacturer of any of the following products:

(1) Motor vehicles and motor vehicle engines we regulate under 40 CFR part 86. This includes light-duty vehicles, light-duty trucks, medium-duty passenger vehicles, highway motorcycles, and heavy-duty highway engines and vehicles.

(2) The following nonroad engines and equipment:

(i) Locomotives and locomotive engines we regulate under 40 CFR part 1033.

(ii) Nonroad compression-ignition engines we regulate under 40 CFR part 1039.

(iii) Marine compression-ignition engines we regulate under 40 CFR part 1042 or 1043.

(iv) Marine spark-ignition engines and vessels we regulate under 40 CFR part 1045 or 1060. We refer to these as Marine SI engines.

(v) Nonroad spark-ignition engines above 19 kW we regulate under 40 CFR part 1048. We refer to these as Large SI engines.

(vi) Recreational vehicles we regulate under 40 CFR part 1051.

(vii) Nonroad spark-ignition engines and equipment at or below 19 kW we regulate under 40 CFR part 1054 or 1060. We refer to these as Small SI engines.

(3) The following stationary internal combustion engines:

(i) Stationary compression-ignition engines we certify under 40 CFR part 60, subpart IIII.

(ii) Stationary spark-ignition engines we certify under 40 CFR part 60, subpart JJJJ.

(4) Portable fuel containers we regulate under 40 CFR part 59, subpart F.

* * * * *

■ 84. Revise § 1027.105 to read as follows:

§ 1027.105 How much are the fees?

(a) Fees are determined based on the date we receive a complete application for certification. Each reference to a year in this subpart refers to the calendar year, unless otherwise specified. Paragraph (b) of this section specifies baseline fees that apply for certificates received in 2020. See paragraph (c) of this section for provisions describing how we calculate fees for 2021 and later years.

(b) The following baseline fees apply for each application for certification:

(1) Except as specified in paragraph (b)(2) of this section for Independent Commercial Importers, the following fees apply in 2020 for motor vehicles and motor vehicle engines:

Category [a]	Certificate type	Fee
(i) Light-duty vehicles, light-duty trucks, medium-duty passenger vehicle, and complete heavy-duty highway vehicles.	Federal	$27,347
(ii) Light-duty vehicles, light-duty trucks, medium-duty passenger vehicle, and complete heavy-duty highway vehicles.	California-only	14,700
(iii) Heavy-duty highway engine	Federal	56,299
(iv) Heavy-duty highway engine	California-only	563
(v) Heavy-duty vehicle	Evap	563
(vi) Highway motorcycle, including Independent Commercial Importers	All	1,852

[a] The specified categories include engines and vehicles that use all applicable fuels.

(2) A fee of $87,860 applies in 2020 for Independent Commercial Importers with respect to the following motor vehicles:

(i) Light-duty vehicles and light-duty trucks.

(ii) Medium-duty passenger vehicles.

(iii) Complete heavy-duty highway vehicles.

(3) The following fees apply in 2020 for nonroad and stationary engines, vehicles, equipment, and components:

Category	Certificate type	Fee
(i) Locomotives and locomotive engines	All	$563
(ii) Marine compression-ignition engines and stationary compression-ignition engines with per-cylinder displacement at or above 10 liters.	All, including EIAPP	563
(iii) Other nonroad compression-ignition engines and stationary compression-ignition engines with per-cylinder displacement below 10 liters.	All	2,940
(iv) Large SI engines and stationary spark-ignition engines above 19 kW	All	563
(v) Marine SI engines. Small SI engines, and stationary spark-ignition engines at or below 19 kW.	Exhaust only	563
(vi) Recreational vehicles	Exhaust (or combined exhaust and evap)	563
(vii) Equipment and fuel-system components associated with nonroad and stationary spark-ignition engines, including portable fuel containers.	Evap (where separate certification is required).	397

(c) We will calculate adjusted fees for 2021 and later years based on changes in the Consumer Price Index and the number of certificates. We will announce adjusted fees for a given year by March 31 of the preceding year.

(1) We will adjust the values specified in paragraph (b) of this section for years after 2020 as follows:

(i) Use the following equation for certification related to evaporative emissions from nonroad and stationary engines when a separate fee applies for certification to evaporative emission standards:

$$\text{Certificate Fee}_{CY} = \left[\left(Op + L \cdot \frac{CPI_{CY-2}}{CPI_{2006}}\right)\right] \cdot \frac{OH}{\left[\left(cert\#_{MY-2} + cert\#_{MY-3}\right) \cdot 0.5\right]}$$

Where:

$\text{Certificate Fee}_{CY}$ = Fee per certificate for a given year.

Op = operating costs are all of EPA's nonlabor costs for each category's compliance program, including any fixed costs associated with EPA's testing laboratory, as described in paragraph (d)(1) of this section.

L = the labor costs, to be adjusted by the Consumer Price Index, as described in paragraph (d)(1) of this section.

CPI_{CY-2} = the Consumer Price Index for the month of November two years before the applicable calendar year, as described in paragraph (d)(2) of this section.

CPI_{2006} = 201.8. This is based on the October 2006 value of the Consumer Price Index. as described in paragraph (d)(2) of this section.

OH = 1.169. This is based on EPA overhead, which is applied to all costs.

$cert\#_{MY-2}$ = the total number of certificates issued for a fee category in the model year two years before the calendar year for the applicable fees as described in paragraph (d)(3) of this section.

$cert\#_{MY-3}$ = the total number of certificates issued for a fee category in the model year three years before the calendar year for the applicable fees as described in paragraph (d)(3) of this section.

(ii) Use the following equation for all other certificates:

$$\text{Certificate Fee}_{CY} = \left[\left(Op + L \cdot \frac{CPI_{CY-2}}{CPI_{2002}}\right)\right] \cdot \frac{OH}{\left[\left(cert\#_{MY-2} + cert\#_{MY-3}\right) \cdot 0.5\right]}$$

Where:

CPI_{2002} = 180.9. This is based on the December 2002 value of the Consumer Price Index as described in paragraph (d)(2) of this section.

(2) The fee for any year will remain at the previous year's amount until the value calculated in paragraph (c)(1) of this section differs by at least $50 from the amount specified for the previous year.

(d) Except as specified in § 1027.110(a) for motor vehicles and motor vehicle engines, we will use the following values to determine adjusted fees using the equation in paragraph (c) of this section:

(1) The following values apply for operating costs and labor costs:

Engine or vehicle category	Op	L
(i) Light-duty, medium-duty passenger, and complete heavy-duty highway vehicle certification	$3,322,039	$2,548,110
(ii) Light-duty, medium-duty passenger, and complete heavy-duty highway vehicle in-use testing	2,858,223	2,184,331
(iii) Independent Commercial Importers identified in § 1027.105(b)(2)	344,824	264,980
(iv) Highway motorcycles	225,726	172,829
(v) Heavy-duty highway engines	1,106,224	1,625,680
(vi) Nonroad compression-ignition engines that are not locomotive or marine engines, and stationary compression-ignition engines with per-cylinder displacement below 10 liters	486,401	545,160
(vii) Evaporative certificates related to nonroad and stationary engines	5,039	236,670
(viii) All other	177,425	548,081

(2) The applicable Consumer Price Index is based on the values published by the Bureau of Labor Statistics for All Urban Consumers at *https://www.usinflationcalculator.com/* under ''Inflation and Prices'' and ''Consumer Price Index Data from 1913 to. . . .''. For example, we calculated the 2006

fees using the Consumer Price Index for November 2004, which is 191.0.

(3) Fee categories for counting the number of certificates issued are based on the grouping shown in paragraph (d)(1) of this section.

■ 85. Amend § 1027.110 by revising paragraph (a) introductory text to read as follows:

§ 1027.110 What special provisions apply for certification related to motor vehicles?

(a) We will adjust fees for light-duty, medium-duty passenger, and complete heavy-duty highway vehicles as follows:

* * * * *

■ 86. Amend § 1027.125 by revising paragraph (e) to read as follows:

§ 1027.125 Can I get a refund?

* * * * *

(e) Send refund and correction requests online at *www.Pay.gov*, or as specified in our guidance.

* * * * *

■ 87. Amend § 1027.130 by revising paragraphs (a) and (b) to read as follows:

§ 1027.130 How do I make a fee payment?

(a) Pay fees to the order of the Environmental Protection Agency in U.S. dollars using electronic funds transfer or any method available for payment online at *www.Pay.gov*, or as specified in EPA guidance.

(b) Submit a completed fee filing form at *www.Pay.gov*.

* * * * *

■ 88. Amend § 1027.135 by revising paragraph (b) to read as follows:

§ 1027.135 What provisions apply to a deficient filing?

* * * * *

(b) We will hold a deficient filing along with any payment until we receive a completed form and full payment. If the filing remains deficient at the end of the model year, we will continue to hold any funds associated with the filing so you can make a timely request for a refund. We will not process an application for certification if the associated filing is deficient.

■ 89. Revise § 1027.155 to read as follows:

§ 1027.155 What abbreviations apply to this subpart?

The following symbols, acronyms, and abbreviations apply to this part:

CFR	Code of Federal Regulations.
CPI	Consumer Price Index.
EPA	U.S. Environmental Protection Agency.
Evap	Evaporative emissions.
EIAPP ...	Engine International Air Pollution Prevention (from MARPOL Annex VI).
ICI	Independent Commercial Importer.
MVECP	Motor vehicle and engine compliance program.
MY	Model year.
U.S.	United States.

PART 1033—CONTROL OF EMISSIONS FROM LOCOMOTIVES

■ 90. The authority citation for part 1033 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 91. Amend § 1033.150 by—

■ a. Removing and reserving paragraphs (a) and (d).

■ b. Revising paragraph (e) introductory text.

■ c. Removing paragraphs (h) through (m).

The revision reads as follows:

§ 1033.150 Interim provisions.

* * * * *

(e) *Producing switch locomotives using certified nonroad engines.* You may use the provisions of this paragraph (e) to produce any number of freshly manufactured or refurbished switch locomotives in model years 2008 through 2017. Locomotives produced under this paragraph (e) are exempt from the standards and requirements of this part subject to the following provisions:

* * * * *

■ 92. Amend § 1033.225 by revising paragraph (e) to read as follows:

§ 1033.225 Amending applications for certification.

* * * * *

(e) The amended application applies starting with the date you submit the amended application, as follows:

(1) For engine families already covered by a certificate of conformity, you may start producing a new or modified locomotive anytime after you send us your amended application, before we make a decision under paragraph (d) of this section. However, if we determine that the affected locomotives do not meet applicable requirements, we will notify you to cease production of the locomotives and may require you to recall the locomotives at no expense to the owner. Choosing to produce locomotives under this paragraph (e) is deemed to be consent to recall all locomotives that we determine do not meet applicable emission standards or other requirements and to remedy the nonconformity at no expense to the owner. If you do not provide information required under paragraph (c) of this section within 30 days after we request it, you must stop producing the new or modified locomotives.

(2) If you amend your application to make the amended application correct and complete, these changes do not apply retroactively. Also, if we determine that your amended application is not correct and complete, or otherwise does not conform to the regulation, we will notify you and describe how to address the error.

* * * * *

■ 93. Revise § 1033.255 to read as follows:

§ 1033.255 EPA decisions.

(a) If we determine an application is complete and shows that the engine family meets all the requirements of this part and the Clean Air Act, we will issue a certificate of conformity for the engine family for that model year. We may make the approval subject to additional conditions.

(b) We may deny an application for certification if we determine that an engine family fails to comply with emission standards or other requirements of this part or the Clean Air Act. We will base our decision on all available information. If we deny an application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke a certificate of conformity if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(3) Cause any test data to become inaccurate.

(4) Deny us from completing authorized activities (see 40 CFR 1068.20). This includes a failure to provide reasonable assistance.

(5) Produce locomotives for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend an application to include all locomotives being produced.

(7) Take any action that otherwise circumvents the intent of the Clean Air Act or this part, with respect to an engine family.

(d) We may void a certificate of conformity for an engine family if you fail to keep records, send reports, or give us information as required under this part or the Act. Note that these are also violations of 40 CFR 1068.101(a)(2).

(e) We may void a certificate of conformity for an engine family if we find that you intentionally submitted false or incomplete information. This includes doing anything after submitting an application that causes

submitted information to be false or incomplete.

(f) If we deny an application or suspend, revoke, or void a certificate, you may ask for a hearing (see § 1033.920).

■ 94. Amend § 1033.601 by revising paragraph (c)(4) and (5) to read as follows:

§ 1033.601 General compliance provisions.

* * * * *

(c) * * *

(4) The provisions for importing engines and equipment under the identical configuration exemption of 40 CFR 1068.315(h) do not apply for locomotives.

(5) The provisions for importing engines and equipment under the ancient engine exemption of 40 CFR 1068.315(i) do not apply for locomotives.

* * * * *

■ 95. Amend § 1033.701 by revising paragraph (k)(1) to read as follows:

§ 1033.701 General provisions.

* * * * *

(k) * * *

(1) You may retire emission credits generated from any number of your locomotives. This may be considered donating emission credits to the environment. Identify any such credits in the reports described in § 1033.730. Locomotives must comply with the applicable FELs even if you donate or sell the corresponding emission credits under this paragraph (k). Those credits may no longer be used by anyone to demonstrate compliance with any EPA emission standards.

* * * * *

■ 96. Amend § 1033.740 by:

■ a. Revising the introductory text; and

■ b. Removing and reserving paragraph (a).

The revision reads as follows:

§ 1033.740 Credit restrictions.

Use of emission credits generated under this part 1033 is restricted depending on the standards against which they were generated.

* * * * *

■ 97. Amend § 1033.901 by revising paragraph (1) if the definition of ''New'' to read as follows:

§ 1033.901 Definitions.

* * * * *

New, * * *

(1) A locomotive or engine is new if its equitable or legal title has never been transferred to an ultimate purchaser. Where the equitable or legal title to a locomotive or engine is not transferred prior to its being placed into service, the locomotive or engine ceases to be new when it is placed into service. A locomotive or engine also becomes new if it is remanufactured or refurbished (as defined in this section). A remanufactured locomotive or engine ceases to be new when placed back into service. With respect to imported locomotives or locomotive engines, the term ''new locomotive'' or ''new locomotive engine'' also means a locomotive or locomotive engine that is not covered by a certificate of conformity under this part or 40 CFR part 92 at the time of importation, and that was manufactured or remanufactured after January 1, 2000, which would have been applicable to such locomotive or engine had it been manufactured or remanufactured for importation into the United States. Note that replacing an engine in one locomotive with an unremanufactured used engine from a different locomotive does not make a locomotive new.

* * * * *

■ 98. Amend § 1033.925 by revising paragraph (e) introductory text to read as follows:

§ 1033.925 Reporting and recordkeeping requirements.

* * * * *

(e) Under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), the Office of Management and Budget approves the reporting and recordkeeping specified in the applicable regulations. The following items illustrate the kind of reporting and recordkeeping we require for locomotives regulated under this part:

* * * * *

PART 1036—CONTROL OF EMISSIONS FROM NEW AND IN-USE HEAVY-DUTY HIGHWAY ENGINES

■ 99. The authority statement for part 1036 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 100. Amend § 1036.1 by revising paragraph (b) to read as follows:

§ 1036.1 Does this part apply for my engines?

* * * * *

(b) This part does not apply with respect to exhaust emission standards for HC, CO, NO_X, or PM except as follows:

(1) The provisions of § 1036.601 apply.

(2) 40 CFR parts 85 and 86 may specify that certain provisions apply.

(3) The provisions of § 1036.501(h)(1) apply.

* * * * *

■ 101. Amend § 1036.108 by revising paragraph (a) introductory text and paragraph (a)(1) introductory text to read as follows:

§ 1036.108 Greenhouse gas emission standards.

* * * * *

(a) *Emission standards.* Emission standards apply for engines and powertrains measured using the test procedures specified in subpart F of this part as follows:

(1) CO_2 emission standards in this paragraph (a)(1) apply based on testing as specified in subpart F of this part. The applicable test cycle for measuring CO_2 emissions differs depending on the engine family's primary intended service class and the extent to which the engines will be (or were designed to be) used in tractors. For medium and heavy heavy-duty engines certified as tractor engines, measure CO_2 emissions using the steady-state duty cycle specified in § 1036.501 (referred to as the ramped-modal cycle, or RMC, even though emission sampling involves measurements from discrete modes). This is intended for engines designed to be used primarily in tractors and other line-haul applications. Note that the use of some RMC-certified tractor engines in vocational applications does not affect your certification obligation under this paragraph (a)(1); see other provisions of this part and 40 CFR part 1037 for limits on using engines certified to only one cycle. For medium and heavy heavy-duty engines certified as both tractor and vocational engines, measure CO_2 emissions using the steady-state duty cycle and the transient duty cycle (sometimes referred to as the FTP engine cycle) specified in § 1036.501. This is intended for engines that are designed for use in both tractor and vocational applications. For all other engines (including engines meeting spark-ignition standards), measure CO_2 emissions using the appropriate transient duty cycle specified in § 1036.501.

* * * * *

■ 102. Amend § 1036.150 by revising paragraphs (e) and (g)(2), paragraph (p) introductory text and adding paragraph (q) to read as follows:

§ 1036.150 Interim provisions.

* * * * *

(e) *Alternate phase-in standards.* Where a manufacturer certifies all of its model year 2013 compression-ignition engines within a given primary intended service class to the applicable alternate standards of this paragraph (e), its compression-ignition engines within that primary intended service class are

subject to the standards of this paragraph (e) for model years 2013 through 2016. This means that once a manufacturer chooses to certify a primary intended service class to the standards of this paragraph (e), it is not allowed to opt out of these standards. Engines certified to these standards are not eligible for early credits under paragraph (a) of this section.

Vehicle type	Model years	LHD engines	MHD engines	HHD engines
Tractors	2013–2015	NA	512 g/hp·hr	485 g/hp·hr.
	2016 and later [a]	NA	487 g/hp·hr	460 g/hp·hr.
Vocational	2013–2015	618 g/hp·hr	618 g/hp·hr	577 g/hp·hr.
	2016 through 2020 [a]	576 g/hp·hr	576 g/hp·hr	555 g/hp·hr.

[a] **Note:** these alternate standards for 2016 and later are the same as the otherwise applicable standards for 2017 through 2020.

* * * * *

(g) * * *

(2) You may use an assigned additive DF of 0.020 g/hp·hr for N_2O emissions from any engine.

* * * * *

(p) *Transition to Phase 2 CO_2 standards.* If you certify all your model year 2020 engines within an averaging set to the model year 2021 FTP and RMC standards and requirements, you may apply the provisions of this paragraph (p) for enhanced generation and use of emission credits. These provisions apply separately for medium heavy-duty engines and heavy heavy-duty engines.

* * * * *

(q) *Confirmatory testing of fuel maps.* We will replace fuel maps as a result of our confirmatory testing if we determine our test results to be equivalent to the manufacturer's declared fuel maps as specified in this paragraph (q).

(1) We will weight our individual duty cycle results using the appropriate vehicle category weighting factors in Table 1 of § 1037.510 to determine a composite CO_2 emission value for that vehicle configuration; then repeat the process for the manufacturer's fuel maps.

(2) The average percent difference between fuel maps is calculated as:

$$difference = \left(\frac{\sum_{i=1}^{N} \frac{e_{\mathrm{CO2compEPA}i} - e_{\mathrm{CO2compManu}i}}{e_{\mathrm{CO2compManu}i}}}{N} \right) \cdot 100\ \%$$

Where:

i = an indexing variable that represents one individual weighted duty cycle result for a vehicle configuration.

N = total number of vehicle configurations.

$e_{CO2compEPA}$ = total composite mass of CO_2 emissions in g/ton-mile for the EPA confirmatory test, rounded to the nearest whole number for vocational vehicles and to the first decimal place for tractors.

$e_{CO2compManu}$ = total composite mass of CO_2 emissions in g/ton-mile for the manufacturer test, rounded to the nearest whole number for vocational vehicles and to the first decimal place for tractors.

(3) Where the average difference between our composite weighted fuel map and the manufacturer's is less than or equal to 2.0%, We will not replace the manufacturer's maps.

■ 103. Amend § 1036.225 by revising paragraphs (e) and (f)(1) to read as follows:

§ 1036.225 Amending my application for certification.

* * * * *

(e) The amended application applies starting with the date you submit the amended application, as follows:

(1) For engine families already covered by a certificate of conformity, you may start producing a new or modified engine configuration any time after you send us your amended application and before we make a decision under paragraph (d) of this section. However, if we determine that the affected engines do not meet applicable requirements, we will notify you to cease production of the engines and may require you to recall the engines at no expense to the owner. Choosing to produce engines under this paragraph (e) is deemed to be consent to recall all engines that we determine do not meet applicable emission standards or other requirements and to remedy the nonconformity at no expense to the owner. If you do not provide information required under paragraph (c) of this section within 30 days after we request it, you must stop producing the new or modified engines.

(2) If you amend your application to make the amended application correct and complete, these changes do not apply retroactively. Also, if we determine that your amended application is not correct and complete, or otherwise does not conform to the regulation, we will notify you and describe how to address the error.

(f) * * *

(1) You may ask to raise your FEL for your engine family at any time before the end of the model year. In your request, you must show that you will still be able to meet the emission standards as specified in subparts B and H of this part. Use the appropriate FELs/FCLs with corresponding production volumes to calculate emission credits for the model year, as described in subpart H of this part.

* * * * *

■ 104. Amend § 1036.230 by revising paragraph (d) and adding paragraph (f) to read as follows:

§ 1036.230 Selecting engine families.

* * * * *

(d) Except as described in paragraph (f) of this section, engine configurations within an engine family must use equivalent greenhouse gas emission controls. Unless we approve it, you may not produce nontested configurations without the same emission control hardware included on the tested configuration. We will only approve it if you demonstrate that the exclusion of the hardware does not increase greenhouse gas emissions.

* * * * *

(f) Engine families may be divided into subfamilies with respect to compliance with CO_2 standards.

■ 105. Amend § 1036.235 by revising paragraphs (b)(1) and (2), and (c)(5) to read as follows:

§ 1036.235 Testing requirements for certification.

* * * * *

(b) * * *

(1) If you are certifying the engine for use in tractors, you must measure CO_2 emissions using the applicable ramped-modal cycle specified in § 1036.501, and measure CH_4, and N_2O emissions using the specified transient cycle.

(2) If you are certifying the engine for use in vocational applications, you must measure CO_2, CH_4, and N_2O emissions using the specified transient duty cycle, including cold-start and hot-start testing as specified in § 1036.501.

* * * * *

(c) * * *

(5) We may use our emission test results for steady-state, idle, cycle-average and powertrain fuel maps as the official emission results. We may also consider how the different fuel maps affect GEM emission results as part of our decision. We will not replace individual points from your fuel map.

* * * * *

■ 105. Revise § 1036.255 to read as follows:

§ 1036.255 What decisions may EPA make regarding a certificate of conformity?

(a) If we determine an application is complete and shows that the engine family meets all the requirements of this part and the Act, we will issue a certificate of conformity for the engine family for that model year. We may make the approval subject to additional conditions.

(b) We may deny an application for certification if we determine that an engine family fails to comply with emission standards or other requirements of this part or the Clean Air Act. We will base our decision on all available information. If we deny an application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke a certificate of conformity if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(3) Cause any test data to become inaccurate.

(4) Deny us from completing authorized activities (see 40 CFR 1068.20). This includes a failure to provide reasonable assistance.

(5) Produce engines for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend an application to include all engines being produced.

(7) Take any action that otherwise circumvents the intent of the Act or this part, with respect to an engine family.

(d) We may void a certificate of conformity for an engine family if you fail to keep records, send reports, or give us information as required under this part or the Act. Note that these are also violations of 40 CFR 1068.101(a)(2).

(e) We may void a certificate of conformity for an engine family if we find that you intentionally submitted false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(f) If we deny an application or suspend, revoke, or void a certificate, you may ask for a hearing (see § 1036.820).

■ 107. Amend § 1036.301 by revising paragraph (b)(2) introductory text to read as follows:

§ 1036.301 Measurements related to GEM inputs in a selective enforcement audit.

* * * * *

(b) * * *

(2) Evaluate cycle-average fuel maps by running GEM based on simulated vehicle configurations representing the interpolated center of every group of four test points that define a boundary of cycle work and average engine speed divided by average vehicle speed. These simulated vehicle configurations are defined from the four surrounding points based on averaging values for vehicle mass, drag area (if applicable), tire rolling resistance, tire size, and axle ratio. The regulatory subcategory is defined by the regulatory subcategory of the vehicle configuration with the greatest mass from those four test points. Figure 1 of this section illustrates a determination of vehicle configurations for engines used in tractors and Vocational Heavy-Duty Vehicles (HDV) using a fixed tire size (see § 1036.540(c)(3)(iii)). The vehicle configuration from the upper-left quadrant is defined by values for Tests 1, 2, 4, and 5 from Table 3 of § 1036.540. Calculate vehicle mass as the average of the values from the four tests. Determine the weight reduction needed for GEM to simulate this calculated vehicle mass by comparing the average vehicle mass to the default vehicle mass for the vehicle subcategory from the four points that has the greatest mass, with the understanding that two-thirds of weight reduction for tractors is applied to vehicle weight and one-third is understood to represent increased payload. This is expressed mathematically as $M_{avg} = M_{subcategory} - \frac{2}{3} \cdot M_{reduction}$, which can be solved for $M_{reduction}$. For vocational vehicles, half of weight reduction is applied to vehicle weight and half is understood to represent increased payload. Use the following values for default vehicle masses by vehicle subcategory:

* * * * *

■ 108. Amend § 1036.501 by revising paragraph (g) and adding paragraph (h) to read as follows:

§ 1036.501 How do I run a valid emission test?

* * * * *

(g) The following additional provisions apply for testing to demonstrate compliance with the emission standards in § 1036.108 for model year 2016 through 2020 engines:

(1) Measure CO_2, CH_4, and N_2O emissions using the transient cycle specified in either 40 CFR 86.1333 or appendix II to this part.

(2) For engines subject to RMC testing under § 1036.108(a)(1), measure CO_2 emissions using the ramped-modal cycle specified in 40 CFR 86.1362.

(h) The following additional provisions apply for testing to demonstrate compliance with the emission standards in § 1036.108 for model year 2021 and later engines:

(1) If your engine is intended for installation in a vehicle equipped with stop-start technology, you may turn the engine off during the idle portions of the duty cycle to represent in-use operation, consistent with good engineering judgment. We recommend installing an engine starter motor and allowing the engine ECU to control the engine stop and start events.

(2) Measure CO_2, CH_4, and N_2O emissions using the transient cycle specified in either 40 CFR 86.1333 or appendix II to this part.

(3) For engines subject to RMC testing under 1036.108(a)(1), use one of the following methods to measure CO_2 emissions:

(i) Use the ramped-modal cycle specified in § 1036.505 using either continuous or batch sampling.

(ii) Measure CO_2 emissions over the ramped-modal cycle specified in 40 CFR 86.1362 using continuous sampling. Integrate the test results by mode to establish separate emission rates for each mode (including the transition following each mode, as applicable). Apply the CO_2 weighting factors

specified in 40 CFR 86.1362 to calculate a composite emission result.

(4) Measure or calculate emissions of criteria pollutants corresponding to your measurements to demonstrate compliance with CO_2 standards. These test results are not subject to the duty-cycle standards of 40 CFR part 86, subart A.

■ 109. Add § 1036.503 to read as follows:

§ 1036.503 Engine data and information for vehicle certification.

You must give vehicle manufacturers information as follows so they can certify model year 2021 and later vehicles:

(a) Identify engine make, model, fuel type, combustion type, engine family name, calibration identification, and engine displacement. Also identify which standards the engines meet.

(b) This paragraph (b) describes three different methods to generate engine fuel maps. Manufacturers may generally rely on any of the three mapping methods. However, for hybrid engines, manufacturers must generate fuel maps using either cycle-average or powertrain testing as described in paragraphs (b)(2) and (3) of this section. For all other hybrids, except mild hybrids, follow paragraph (b)(3) of this section. Vehicle manufacturers must use the powertrain method described in paragraph (b)(2) of this section for any vehicle with a transmission that is not automatic, automated manual, manual, or dual-clutch.

(1) *Combined steady-state and cycle-average.* Determine steady-state engine fuel maps and fuel consumption at idle as described in § 1036.535, and determine cycle-average engine fuel maps as described in § 1036.540, excluding cycle-average fuel maps for highway cruise cycles.

(2) *Cycle-average.* Determine fuel consumption at idle as described in § 1036.535, and determine cycle-average engine fuel maps as described in § 1036.540, including cycle-average engine fuel maps for highway cruise cycles. In this case, you do not need to determine steady-state engine fuel maps under § 1036.535. Fuel mapping for highway cruise cycles using cycle-average testing is an alternate method, which means that we may do confirmatory testing based on steady-state fuel mapping for highway cruise cycles even if you do not; however, we will use the steady-state fuel maps to create cycle-average fuel maps. In § 1036.540 we define the vehicle configurations for testing; we may add more vehicle configurations to better represent your engine's operation for the range of vehicles in which your engines will be installed (see 40 CFR 1065.10(c)(1)).

(3) *Powertrain.* Generate a powertrain fuel map as described in 40 CFR 1037.550. In this case, you do not need to perform fuel mapping under § 1036.535 or § 1036.540.

(c) Provide the following information if you generate engine fuel maps using either paragraph (b)(1) or (2) of this section:

(1) Full-load torque curve for installed engines, and the full-load torque curve of the engine (parent engine) with the highest fueling rate that shares the same engine hardware, including the turbocharger, as described in 40 CFR 1065.510. You may use 40 CFR 1065.510(b)(5)(i) for engines subject to spark-ignition standards. Measure the torque curve for hybrid engines as described in 40 CFR 1065.510(g) with the hybrid system active.

(2) Motoring torque map as described in 40 CFR 1065.510(c)(2) and (4) for conventional and hybrid engines, respectively. For engines with a low-speed governor, remove data points where the low speed governor is active. If you don't know when the low-speed governor is active, we recommend removing all points below 40 r/min above the low warm idle speed.

(3) Declared engine idle speed. For vehicles with manual transmissions, this is the engine speed with the transmission in neutral. For all other vehicles, this is the engine's idle speed when the transmission is in drive.

(4) The engine idle speed during the cycle-average fuel map.

(5) The engine idle torque during the cycle-average fuel map.

(d) If you generate powertrain fuel maps using paragraph (b)(3) of this section, determine the system continuous rated power according to § 1036.527.

■ 110. Revise § 1036.505 to read as follows:

§ 1036.505 Ramped-modal testing procedures.

(a) Starting in model year 2021, you must measure CO_2 emissions using the ramped-modal cycle in 40 CFR 86.1362 as described in § 1036.501, or using the ramped-modal cycle in this section.

(b) Perform ramped-modal testing with one of the following procedures:

(1) For engine testing, the ramped-modal duty cycles are based on normalized speed and torque values relative to certain maximum values. Denormalize torque as described in 40 CFR 1065.610(d). Denormalize speed as described in 40 CFR 1065.512.

(2) For hybrid powertrain testing, follow 40 CFR 1037.550 to carry out the test, but do not compensate the duty cycle for the distance driven. For cycles that begin with a set of contiguous idle points, leave the transmission in neutral or park for the full initial idle segment. Place the transmission into drive within 5 seconds of the first nonzero vehicle speed setpoint. Place the transmission into park or neutral when the cycle reaches RMC mode 14. Use the following vehicle parameters in place of those in 40 CFR 1037.550 to define the vehicle model in 40 CFR 1037.550(b)(3):

(i) Determine the vehicle test mass, *M,* as follows:

$$M = 15.1 \cdot P_{\text{contrated}}^{1.31}$$

Eq. 1036.505-1

Where:

$P_{\text{contrated}}$ = the continuous rated power of the hybrid system determined in § 1036.527.

Example:

$P_{\text{contrated}}$ = 350.1 kW

$M = 15.1 \cdot 350.1^{1.31} = 32499$ kg

(ii) Determine the vehicle frontal area, A_{front}, as follows:

(A) For $M \leq 18050$ kg:

$$A_{\text{front}} = -1.69 \cdot 10^{-8} \cdot M^2 + 6.33 \cdot 10^{-4} \cdot M + 1.67$$

Eq. 1036.505-2

Example:

M = 16499 kg

$A_{\text{front}} = -1.69 \cdot 10^{-8} \cdot 16499^2 + 6.33 \cdot 10^{-4} \cdot 16499 + 1.67 = 7.51\ \text{m}^2$

(B) For $M > 18050$ kg, $A_{\text{front}} = 7.59\ \text{m}^2$

(iii) Determine the vehicle drag area, C_dA, as follows:

$$C_d A = \frac{\left(0.00299 \cdot A_{front} - 0.000832\right) \cdot 2 \cdot g \cdot 3.6^2}{\rho}$$

Eq. 1036.505-3

Where:

g = gravitational constant = 9.81 m/s².

ρ = air density at reference conditions. Use ρ = 1.1845 kg/m³.

Example:

$$C_d A = \frac{\left(0.00299 \cdot 7.59 - 0.000832\right) \cdot 2 \cdot 9.81 \cdot 3.6^2}{1.1845} = 4.69 \text{ m}^2$$

(iv) Determine the coefficient of rolling resistance, C_{rr}, as follows:

$$C_{rr} = 0.00513 + \frac{17.6}{M}$$

Eq. 1036.505-4

Example:

$$C_{rr} = 0.00513 + \frac{17.6}{32499} = 0.0057 \text{ kg/kg}$$

(v) Determine the inertial mass of rotating components, $M_{rotating}$, as follows:

$$M_{rotating} = 0.07 \cdot M$$

Eq. 1036.505-5

Example:

$M_{rotating}$ = 0.07·32499 = 2274.9 kg

(vi) Select a drive axle ratio, k_a, that represents the worst-case pair of drive axle ratio and tire size for CO_2 expected for vehicles in which the powertrain will be installed. This is typically the highest numeric axle ratio.

(vii) Select a tire radius, *r,* that represents the worst-case pair of tire size and drive axle ratio for CO_2 expected for vehicles in which the powertrain will be installed. This is typically the smallest tire radius.

(viii) If you are certifying a hybrid powertrain system without the transmission, use a default transmission efficiency of 0.95. If you certify with this configuration, you must use 40 CFR 1037.550(b)(3)(ii) to create the vehicle model along with its default transmission shift strategy. Use the transmission parameters defined in Table 1 of § 1036.540 to determine transmission type and gear ratio. Use the transient cycle parameters for the FTP and the highway cruise cycle parameters for the RMC.

(ix) Select axle efficiency, Eff_{axle}, according to 40 CFR 1037.550.

(c) Measure emissions using the ramped-modal duty cycle shown in Table 1 of § 1036.505 to determine whether engines and hybrid powertrains meet the steady-state compression-ignition standards specified in subpart B of this part. Table 1 of this section specifies settings for engine and hybrid powertrain testing, as follows:

(1) The duty cycle for testing engines involves a schedule of normalized engine speed and torque values.

(2) The duty cycle for hybrid powertrain testing involves a schedule of vehicle speeds and road grade. Determine road grade at each point based on the continuous rated power of the hybrid powertrain system, $P_{contrated}$, determined in § 1036.527 and the specified road grade coefficients using the following equation:

$$Road\ grade = a \cdot P^2_{contrated} + b \cdot P_{contrated} + c$$

TABLE 1 TO § 1036.505—RAMPED-MODAL DUTY CYCLE

RMC mode	Engine testing			Powertrain testing			
	Time in mode (seconds)	Engine speed [a b]	Torque (percent) [b c]	Vehicle speed (mi/hr)	Road-grade coefficients		
					a	*b*	*c*
1a Steady-state	124	Warm Idle	0	Warm Idle	0	0	0
1b Transition	20	Linear Transition	Linear Transition	Linear Transition	–4.6E–3	–9.1E+0	–4.6E–3
2a Steady-state	196	A	100	53.38	589.2E–6	2.1E+0	589.2E–6
2b Transition	20	Linear Transition	Linear Transition	Linear Transition	0	0	0
3a Steady-state	220	B	50	65.00	10.3E–3	–1.6E+0	10.3E–3
3b Transition	20	B	Linear Transition	65.00	0	0	0
4a Steady-state	220	B	75	65.00	7.9E–3	–280.7E–3	7.9E–3
4b Transition	20	Linear Transition	Linear Transition	Linear Transition	6.0E–3	2.3E+0	6.0E–3
5a Steady-state	268	A	50	53.38	5.9E–3	–605.6E–3	5.9E–3
5b Transition	20	A	Linear Transition	53.38	7.8E–3	–349.3E–3	7.8E–3
6a Steady-state	268	A	75	53.38	3.3E–3	728.3E–3	3.3E–3
6b Transition	20	A	Linear Transition	53.38	6.7E–3	–668.2E–3	6.7E–3
7a Steady-state	268	A	25	53.38	8.9E–3	–2.0E+0	8.9E–3
7b Transition	20	Linear Transition	Linear Transition	Linear Transition	6.9E–3	–3.1E+0	6.9E–3
8a Steady-state	196	B	100	65.00	5.5E–3	798.2E–3	5.5E–3
8b Transition	20	B	Linear Transition	65.00	10.0E–3	–1.2E+0	10.0E–3
9a Steady-state	196	B	25	65.00	13.6E–3	–3.2E+0	13.6E–3
9b Transition	20	Linear Transition	Linear Transition	Linear Transition	13.8E–3	–5.2E+0	13.8E–3
10a Steady-state	28	C	100	77.80	13.0E–3	–1.3E+0	13.0E–3
10b Transition	20	C	Linear Transition	77.80	16.1E–3	–3.0E+0	16.1E–3
11a Steady-state	4	C	25	77.80	16.1E–3	–4.0E+0	16.1E–3
11b Transition	20	C	Linear Transition	77.80	17.7E–3	–3.7E+0	17.7E–3
12a Steady-state	4	C	75	77.80	15.5E–3	–2.5E+0	15.5E–3
12b Transition	20	C	Linear Transition	77.80	13.6E–3	–3.0E+0	13.6E–3
13a Steady-state	4	C	50	77.80	15.7E–3	–2.6E+0	15.7E–3
13b Transition	20	Linear Transition	Linear Transition	Linear Transition	6.9E–3	17.7E+0	6.9E–3
14 Steady-state	144	Warm Idle	0	Warm Idle	0	0	0

[a] Engine speed terms are defined in 40 CFR part 1065.
[b] Advance from one mode to the next within a 20 second transition phase. During the transition phase, command a linear progression from the settings of the current mode to the settings of the next mode.
[c] The percent torque is relative to maximum torque at the commanded engine speed.

■ 111. Revise § 1036.510 to read as follows:

§ 1036.510 Transient testing procedures.

(a) Measure emissions by testing the engine or hybrid powertrain on a dynamometer with one of the following transient duty cycles to determine whether it meets the transient emission standards:

(1) For spark-ignition engines, use the transient duty cycle described in paragraph (a) of Appendix II of this part.

(2) For compression-ignition engines, use the transient duty cycle described in paragraph (b) of Appendix II of this part.

(3) For spark-ignition hybrid powertrains, use the transient duty cycle described in paragraph (a) of Appendix II of this part.

(4) For compression-ignition hybrid powertrains, use the transient duty cycle described in paragraph (b) of Appendix II of this part.

(b) Perform the following depending on if you are testing engines or hybrid powertrains:

(1) For engine testing, the transient duty cycles are based on normalized speed and torque values relative to certain maximum values. Denormalize torque as described in 40 CFR 1065.610(d). Denormalize speed as described in 40 CFR 1065.512.

(2) For hybrid powertrain testing, follow § 1036.505(b)(2) to carry out the test except replace $P_{\text{contrated}}$ with P_{rated}, the peak rated power determined in § 1036.527 and keep the transmission in drive for all idle segments after the initial idle segment.

(c) The transient test sequence consists of an initial run through the transient duty cycle from a cold start, 20 minutes with no engine operation, then a final run through the same transient duty cycle. Start sampling emissions immediately after you start the engine and continue sampling until the duty cycle is complete. Calculate the total emission mass of each constituent, *m,* and the total work, *W,* over each test interval according to 40 CFR 1065.650. Calculate the official transient emission result from the cold-start and hot-start test intervals using the following equation:

$$Official\ transient\ emission\ result = \frac{cold\ start\ emissions\,(g) + 6 \cdot hot\ start\ emissions\,(g)}{cold\ start\ work\,(hp \cdot hr) + 6 \cdot hot\ start\ work\,(hp \cdot hr)}$$

Eq. 1036.510-1

(d) Calculate cycle statistics and compare with the established criteria as specified in 40 CFR 1065.514 for engines and 40 CFR 1037.550 for hybrid powertrains to confirm that the test is valid.

■ 112. Add § 1036.527 to read as follows:

§ 1036.527 Powertrain system rated power determination.

This section describes how to determine the peak and continuous rated power of conventional and hybrid powertrain systems for carrying out

testing according to § 1036.505, § 1036.510, and 40 CFR 1037.550.

(a) Set up the powertrain according to 40 CFR 1037.550, but use the vehicle parameters in § 1036.505(b)(2), except replace $P_{contrated}$ with the manufacturer declared system peak power. Note that if you repeat the system rated power determination as described in paragraph (i)(4) of this section, use the measured system peak power in place of $P_{contrated}$.

(b) For conventional powertrains follow paragraphs (d), (e), and (h) of this section. For hybrid powertrains, follow paragraphs (c) through (j) of this section.

(c) Prior to the start of each test interval verify the following:

(i) The state-of-charge of the the rechargeable energy storage system (RESS) is ≥90% of the operating range between the minimum and maximum RESS energy levels specified by the manufacturer.

(ii) The conditions of all hybrid system components are within their normal operating range as declared by the manufacturer.

(iii) RESS restrictions (*e.g.,* power limiting, thermal limits, etc.) are not active.

(d) Set maximum driver demand for a full load acceleration at 0% road grade starting at an initial vehicle speed of 0 mi/hr. Stop the test 300 seconds after the vehicle speed has stopped increasing above the maximum value observed during the test.

(e) Record the powertrain system speed and torque values at the wheel hub at 100 Hz and use these in conjunction with the vehicle model to calculate $P_{sys,vehicle}$.

(f) After completing the test interval described in paragraphs (d) and (e) of this section repeat the steps in paragraphs (c) through (e) of this section for 2% and 6% road grades.

(g) After completing the test intervals described in paragraphs (c) and (e) of this section repeat the steps in paragraphs (c) through (f) of this section for initial vehicle speeds of 20 mi/hr and 40 mi/hr. After completing the test interval on the last road grade and initial vehicle speed point, the rated power determination sequence is complete.

(h) Calculate the system peak power, P_{sys}, for each test run as follows:

$$P_{sys} = \frac{P_{sys,vehicle}}{\varepsilon_{trans} \cdot \varepsilon_{axle}}$$

Eq. 1036.527-1

Where:

$P_{sys,vehicle}$ = the calculated vehicle system peak power.

ε_{trans} = the default transmission efficiency = 0.95.

ε_{axle} = the default axle efficiency = 0.955.

Example:

$P_{sys,vehicle}$ = 317.6 kW

$$P_{sys} = \frac{317.6}{0.95 \cdot 0.955} = 350.1 \text{ kW}$$

(i) The system peak rated power, P_{rated}, is the highest calculated P_{sys} where the coefficient of variation (COV) <2%. The COV is determined as follows:

(1) Calculate the standard deviation, $\sigma(t)$.

$$\sigma(t) = \sqrt{\frac{1}{N} \cdot \sum_{i=1}^{N} \left(P_{sysi} - \bar{P}_{\mu}(t)\right)^2}$$

Eq. 1036.527-2

Where:

N = the number of measurement intervals = 20.

P_{sysi} = the N samples in the 100 Hz signal previously used to calculate the respective $P_{\mu}(t)$ values at the time step t.

$\bar{P}_{\mu}(t)$ = the power vector from the results of each test run that is determined by a moving averaging of 20 consecutive samples of P_{sys} in the 100 Hz that converts $\bar{P}_{\mu}(t)$ to a 5 Hz signal.

(2) The resulting 5 Hz power and covariance signals are used to determine system rated power.

(3) The coefficient of variation COV(t) shall be calculated as the ratio of the standard deviation, $\sigma(t)$, to the mean value of power, $\bar{P}_{\mu}(t$, for each time step t.

$$COV(t) = \frac{\sigma(t)}{\bar{P}_{\mu}(t)}$$

Eq. 1036.527-3

(4) If the determined system peak rated power is not within ±3% of the system peak rated power as declared by the manufacturer, you must repeat the procedure in paragraphs (a) through (i)(3) of this section using the measured system peak rated power determined in paragraph (i) of this section instead of the manufacturer declared value. The result from this repeat is the final determined system peak rated power.

(5) If the determined system peak rated power is within ±3% of the system peak rated power as declared by the manufacturer, the declared system peak rated power shall be used.

(j) Determine continuous rated power, $P_{contrated}$, by following paragraphs (i)(1) through (3) of this section using the data that met the requirements of paragraph (i)(4) or (i)(5) of this section, where the system continuous rated power, $P_{contrated}$, is the lowest calculated P_{sys} where the coefficient of variation (COV) <2%. Set N = 1000 in Eq. 1036.527–2, which results in a 0.1 Hz signal in paragraph (i)(2) of this section. For this determination, use the data collected in paragraphs (a) through (g) of this section starting with the point 30 seconds after the vehicle speed has stopped increasing above the maximum value observed during the test.

■ 113. Amend § 1036.530 by revising paragraph (b) to read as follows:

§ 1036.530 Calculating greenhouse gas emission rates.

* * * * *

(b) Adjust CO_2 emission rates calculated under paragraph (a) of this section for measured test fuel properties as specified in this paragraph (b). This adjustment is intended to make official emission results independent of differences in test fuels within a fuel type. Use good engineering judgment to develop and apply testing protocols to minimize the impact of variations in test fuels.

(1) Determine your test fuel's mass-specific net energy content, $E_{mfuelmeas}$, also known as lower heating value, in MJ/kg, expressed to at least three decimal places. Determine $E_{mfuelmeas}$ as follows:

(i) For liquid fuels, determine $E_{mfuelmeas}$ according to ASTM D4809 (incorporated by reference in § 1036.810). Have the sample analyzed by three different labs and use the arithmetic mean of the results as your test fuel's $E_{mfuelmeas}$.

(ii) For gaseous fuels, determine $E_{mfuelmeas}$ according to ASTM D3588 (incorporated by reference in § 1036.810).

(2) Determine your test fuel's carbon mass fraction, w_C, as described in 40 CFR 1065.655(d), expressed to at least three decimal places; however, you must measure fuel properties rather than using the default values specified in Table 1 of 40 CFR 1065.655.

(i) For liquid fuels, have the sample analyzed by three different labs and use the arithmetic mean of the results as your test fuel's w_C.

(ii) For gaseous fuels, have the sample analyzed by a single lab and use that result as your test fuel's w_C.

(3) If, over a period of time, you receive multiple fuel deliveries from a single stock batch of test fuel, you may use constant values for mass-specific energy content and carbon mass fraction, consistent with good engineering judgment. To use this

provision, you must demonstrate that every subsequent delivery comes from the same stock batch and that the fuel has not been contaminated.

(4) Correct measured CO_2 emission rates as follows:

$$e_{CO2cor} = e_{CO2} \cdot \frac{E_{mfuelmeas}}{E_{mfuelCref} \cdot w_{Cmeas}}$$

Eq. 1036.530-1

Where:

e_{CO2} = the calculated CO_2 emission result.

$E_{mfuelmeas}$ = the mass-specific net energy content of the test fuel as determined in paragraph (b)(1) of this section. Note that dividing this value by w_{Cmeas} (as is done in this equation) equates to a carbon-specific net energy content having the same units as $E_{mfuelCref}$.

$E_{mfuelCref}$ = the reference value of carbon-mass-specific net energy content for the appropriate fuel type, as determined in Table 1 of this section.

w_{Cmeas} = carbon mass fraction of the test fuel (or mixture of test fuels) as determined in paragraph (b)(2) of this section.

Example:

e_{CO2} = 630.0 g/hp·hr

$E_{mfuelmeas}$ = 42.528 MJ/kg

$E_{mfuelCref}$ = 49.3112 MJ/kgC

w_{Cmeas} = 0.870

$$e_{CO2cor} = 630.0 \cdot \frac{42.528}{49.3112 \cdot 0.870}$$

e_{CO2cor} = 624.5 g/hp·hr

TABLE 1 TO § 1036.530—REFERENCE FUEL PROPERTIES

Fuel type [a]	Reference fuel carbon-mass-specific net energy content, $E_{mfuelCref}$, (MJ/kgC) [b]	Reference fuel carbon mass fraction, w_{Cref} [b]
Diesel fuel	49.3112	0.874
Gasoline	50.4742	0.846
Natural Gas	66.2910	0.750
LPG	56.5218	0.820
Dimethyl Ether	55.3886	0.521
High-level ethanol-gasoline blends	50.3211	0.576

[a] For fuels that are not listed, you must ask us to approve reference fuel properties.

[b] For multi-fuel streams, such as natural gas with diesel fuel pilot injection, use good engineering judgment to determine blended values for $E_{mfuelCref}$ and w_{Cref} using the values in this table.

* * * * *

■ 114. Revise § 1036.535 to read as follows:

§ 1036.535 Determining steady-state engine fuel maps and fuel consumption at idle.

This section describes how to determine an engine's steady-state fuel map and fuel consumption at idle for model year 2021 and later vehicles. Vehicle manufacturers may need these values to demonstrate compliance with emission standards under 40 CFR part 1037 as described in § 1036.510.

(a) *General test provisions.* Perform fuel mapping using the procedure described in paragraph (b) of this section to establish measured fuel-consumption rates at a range of engine speed and load settings. Measure fuel consumption at idle using the procedure described in paragraph (c) of this section. If you perform cycle-average mapping for highway cruise cycles as described in § 1036.540, omit mapping under paragraph (b) of the section and instead perform mapping as described in paragraph (d) of this section. Use these measured fuel-consumption values to declare fuel-consumption rates for certification as described in paragraph (e) of this section.

(1) Map the engine's torque curve and declare engine idle speed as described in § 1036.503(c)(1) and (3), and perform emission measurements as described in 40 CFR 1065.501 and 1065.530 for discrete-mode steady-state testing. This section uses engine parameters and variables that are consistent with 40 CFR part 1065.

(2) Measure NO_X emissions for each specified sampling period in g/s. You may perform these measurements using a NO_X emission-measurement system that meets the requirements of 40 CFR part 1065, subpart J. Include these measured NO_X values any time you report to us your fuel consumption values from testing under this section. If a system malfunction prevents you from measuring NO_X emissions during a test under this section but the test otherwise gives valid results, you may consider this a valid test and omit the NO_X emission measurements; however, we may require you to repeat the test if we determine that you inappropriately voided the test with respect to NO_X emission measurement.

(b) *Steady-state fuel mapping.* Determine fuel-consumption rates for each engine configuration over a series of steady-state engine operating points consisting of pairs of speed and torque points as described in this paragraph (b). You may use shared data across an engine platform to the extent that the fuel-consumption rates remain valid. For example, if you test a high-output configuration and create a different configuration that uses the same fueling strategy but limits the engine operation to be a subset of that from the high-output configuration, you may use the fuel-consumption rates for the reduced number of mapped points for the low-output configuration, as long as the narrower map includes at least 70 points. Perform fuel mapping as follows:

(1) Generate the sequence of steady-state engine operating points as follows:

(i) Determine the required steady-state engine operating points as follows:

(A) For engines with an adjustable warm idle speed setpoint, select the following ten speed setpoints: Minimum warm idle speed, $f_{nidlemin}$, the highest speed above maximum power at which 70% of maximum power occurs, n_{hi}, and eight equally spaced points between

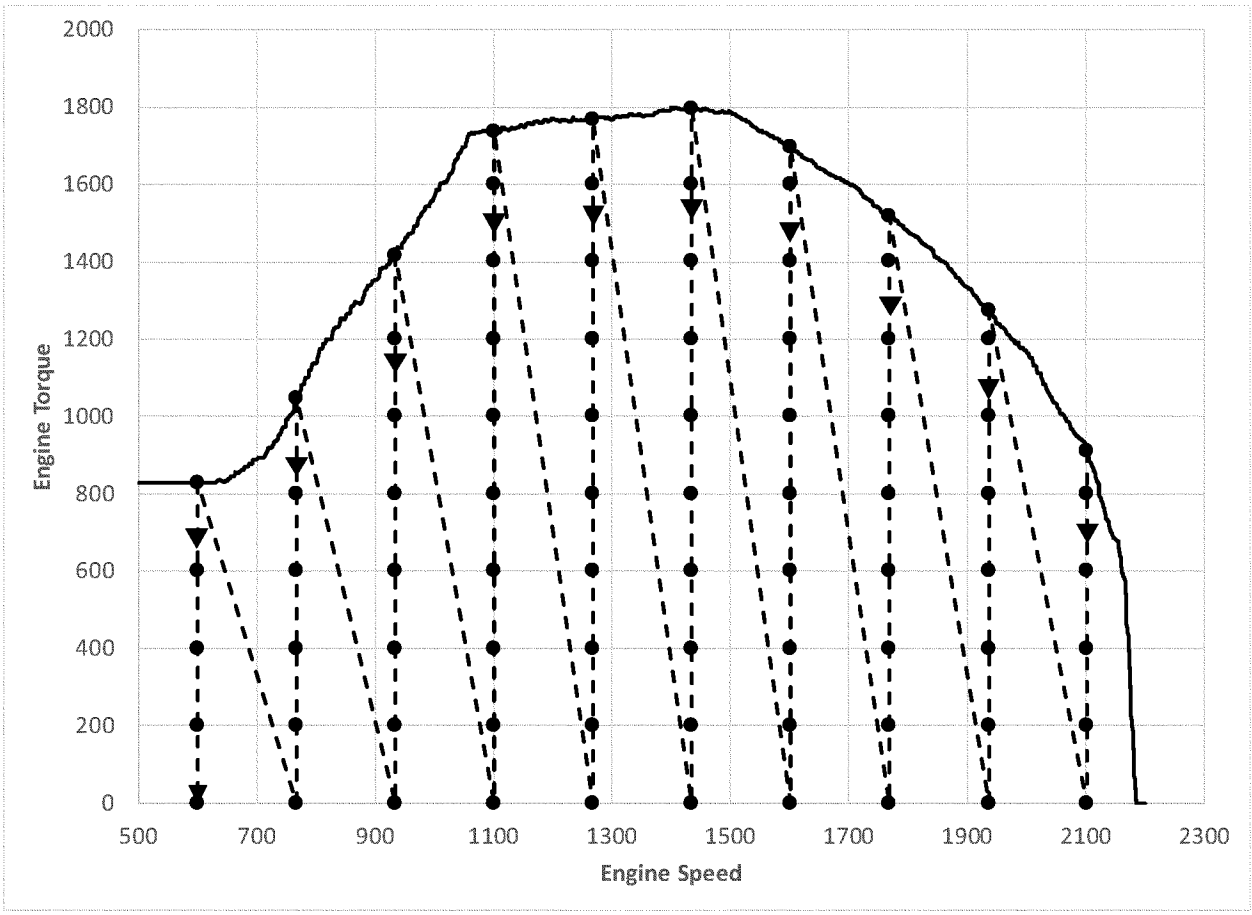
$f_{nidlemin}$ and n_{hi}. (See 40 CFR 1065.610(c)). For engines without an adjustable warm idle speed replace minimum warm idle speed with warm idle speed, f_{nidle}.

(B) Select the following ten torque setpoints at each of the selected speed setpoints: Zero ($T = 0$), maximum mapped torque, $T_{max\ mapped}$, and eight equally spaced points between $T = 0$ and $T_{max\ mapped}$. For each of the selected speed setpoints, replace any torque setpoints that are above the mapped torque at the selected speed setpoint, T_{max}, minus 5 percent of $T_{max\ mapped}$, with one test point at T_{max}.

(ii) Select any additional (optional) steady-state engine operating points consistent with good engineering judgment. For example, when linear interpolation between the defined points is not a reasonable assumption for determining fuel consumption from the engine. For each additional speed setpoint, increments between torque setpoints must be no larger than one-ninth of $T_{max,mapped}$ and we recommend including a torque setpoint of T_{max}. If you select a maximum torque setpoint less than T_{max}, use good engineering judgement to select your maximum torque setpoint to avoid unrepresentative data. We will select at least as many points as you.

(iii) Set the run order for all of the steady-state engine operating points (both required and optional) as described in this paragraph (b)(1)(iii). Arrange the list of steady-state engine operating points such that the resulting list of paired speed and torque setpoints begins with the highest speed setpoint and highest torque setpoint followed by decreasing torque setpoints at the highest speed setpoint. This will be followed by the next lowest speed setpoint and the highest torque setpoint at that speed setpoint continuing through all the steady-state engine operating points and ending with the lowest speed ($f_{nidlemin}$) and torque setpoint ($T = 0$). Figure 1 provides an example of this array of points and run order.

Figure 1 of § 1036.535—Steady-state engine operation point run order



(iv) The steady-state engine operating points that have the highest torque setpoint for a given speed setpoint are optional reentry points into the steady-state-fuel-mapping sequence, should you need to pause or interrupt the sequence during testing.

(v) The steady-state engine operating points that have the lowest torque setpoint for a given speed setpoint are optional exit points from the steady-state-fuel-mapping sequence, should you need to pause or interrupt the sequence during testing.

(2) If the engine has an adjustable warm idle speed setpoint, set it to its minimum value, $f_{nidlemin}$.

(3) During each test interval, control speed within ±1% of n_{hi} and engine torque within ±5% of $T_{max\ mapped}$ except for the following cases where both setpoints cannot be achieved because the steady-state engine operating point is near an engine operating boundary:

(i) For steady-state engine operating points that cannot be achieved and the operator demand stabilizes at minimum; control the dynamometer so it gives priority to follow the torque setpoint and let the engine govern the speed (see

40 CFR 1065.512(b)(1)). In this case, the tolerance on speed control in paragraph (b)(3) of this section does not apply and engine torque is controlled to within ±25 N·m.

(ii) For steady-state engine operating points that cannot be achieved and the operator demand stabilizes at maximum and the speed setpoint is below 90% of n_{hi}; control the dynamometer so it gives priority to follow the speed setpoint and let the engine govern the torque (see 40 CFR 1065.512(b)(2)). In this case, the tolerance on torque control given in paragraph (b)(3) of this section does not apply.

(iii) For steady-state engine operating points that cannot be achieved and the operator demand stabilizes at maximum and the speed setpoint is at or above 90% of n_{hi}; control the dynamometer so it gives priority to follow the torque setpoint and let the engine govern the speed (see 40 CFR 1065.512(b)(1)). In this case, the tolerance on speed control given in paragraph (b)(3) of this section does not apply.

(iv) For the steady-state engine operating points at the minimum speed setpoint and maximum torque setpoint, you may select a dynamometer control mode that gives priority to speed and an engine control mode that gives priority to torque. In this case, if the operator demand stabilizes at minimum or maximum, the tolerance on torque control in paragraph (b)(3) of this section does not apply.

(4) You may select the appropriate dynamometer and engine control modes in real-time or at any time prior based on various factors including the operating setpoint location relative to an engine operating boundary. Warm-up the engine as described in 40 CFR 1065.510(b)(2).

(6) Within 60 seconds after concluding the warm-up, linearly ramp the speed and torque setpoints over 5 seconds to the first steady-state engine operating point from paragraph (b)(1) of this section.

(7) Operate the engine at the steady-state engine operating point for (70 ± 1) seconds, and then start the test interval and record measurements using one of the following methods. You must also measure and report NO_X emissions over each test interval as described in paragraph (a)(2) of this section. If you use redundant systems for the determination of fuel consumption, for example combining measurements of dilute and raw emissions when generating your map, follow the requirements of 40 CFR 1065.201(d).

(i) *Indirect measurement of fuel flow.* Record speed and torque and measure emissions and other inputs needed to run the chemical balance in 40 CFR 1065.655(c) for a (30 ± 1) second test interval; determine the corresponding mean values for the test interval. We will use an average of indirect measurement of fuel flow with dilute sampling and direct sampling. For dilute sampling of emissions, in addition to the background measurement provisions described in 40 CFR 1065.140 you may do the following:

(A) If you use batch sampling to measure background emissions, you may sample periodically into the bag over the course of multiple test intervals and read them as allowed in paragraph (b)(10)(i) of this section. If you use this provision, you must apply the same background readings to correct emissions from each of the applicable test intervals.

(B) You may determine background emissions by sampling from the dilution air during the non-test interval periods in the test sequence, including pauses allowed in paragraph (b)(10)(i) of this section. If you use this provision, you must allow sufficient time for stabilization of the background measurement; followed by an averaging period of at least 30 seconds. Use the average of the most recent pre-test interval and the next post-test interval background readings to correct each test interval. The most recent pre-test interval background reading must be taken no greater than 30 minutes prior to the start of the first applicable test interval and the next post-test interval background reading must be taken no later than 30 minutes after the end of the last applicable test interval. Background readings must be taken prior to the test interval for each reentry point and after the test interval for each exit point or more frequently.

(ii) *Direct measurement of fuel flow.* Record speed and torque and measure fuel consumption with a fuel flow meter for a (30 ± 1) second test interval; determine the corresponding mean values for the test interval.

(8) After completing the test interval described in paragraph (b)(7) of this section, linearly ramp the speed and torque setpoints over 5 seconds to the next steady-state engine operating point.

(i) You may pause the steady-state-fuel-mapping sequence at any of the reentry points (as noted in paragraph (b)(1)(iv) of this section) to calibrate emission-measurement instrumentation; to read and evacuate background bag samples collected over the course of multiple test intervals; or to sample the dilution air for background emissions. This provision allows you to spend more than the 70 seconds noted in paragraph (b)(7) of this section.

(ii) If an infrequent regeneration event occurs, interrupt the steady-state-fuel-mapping sequence and allow the regeneration event to finish. You may continue to operate at the steady-state engine operating point where the event began or, using good engineering judgement, you may transition to another operating condition to reduce the regeneration event duration. You may complete any post-test interval activities to validate test intervals prior to the most recent reentry point. Once the regeneration event is finished, linearly ramp the speed and torque setpoints over 5 seconds to the most recent reentry point described in paragraph (b)(1)(iv) of this section, and restart the steady-state-fuel-mapping sequence by repeating the steps in paragraphs (b)(7) and (8) of this section for all the remaining steady-state engine operating points. Operate at the reentry point for longer than the 70 seconds in paragraph (b)(7), as needed, to bring the aftertreatment to representative thermal conditions. Void all test intervals in the steady-state-fuel-mapping sequence beginning with the reentry point and ending with the steady-state engine operating point where the regeneration event began.

(iii) You may interrupt the steady-state-fuel-mapping sequence after any of the exit points described in paragraph (b)(1)(v) of this section. To restart the steady-state-fuel-mapping sequence; begin with paragraph (b)(5) of this section and continue with paragraph (b)(6) of this section, except that the steady-state engine operating point is the next reentry point, not the first operating point from paragraph (b)(1) of this section. Follow paragraphs (b)(7) and (8) of this section until all remaining steady-state engine operating points are tested.

(iv) If the steady-state-fuel-mapping sequence is interrupted due test equipment or engine malfunction, void all test intervals in the steady-state-fuel-mapping sequence beginning with the most recent reentry point as described in paragraph (b)(1)(iv) of this section. You may complete any post-test interval activities to validate test intervals prior to the most recent reentry point. Correct the malfunction and restart the steady-state-fuel-mapping sequence as described in paragraph (b)(10)(iii) of this section.

(v) If any steady-state engine test interval is voided, void all test intervals in the steady-state-fuel-mapping sequence beginning with the most recent reentry point as described in paragraph (b)(1)(iv) of this section and

ending with the next exit point as described in paragraph (b)(1)(v) of this section. Rerun that segment of the steady-state-fuel-mapping sequence. If multiple test intervals are voided in multiple speed setpoints, you may exclude the speed setpoints where all of the test intervals were valid from the rerun sequence. Rerun the steady-state-fuel-mapping sequence as described in paragraph (b)(10)(iii) of this section.

(11) If you determine fuel-consumption rates using emission measurements from the raw or diluted exhaust, calculate the mean fuel mass flow rate, $\overline{\dot{m}}_{fuel}$, for each point in the fuel map using the following equation:

$$\overline{\dot{m}}_{fuel} = \frac{M_C}{w_{Cmeas}} \cdot \left(\overline{\dot{n}}_{exh} \cdot \frac{\overline{x}_{Ccombdry}}{1 + \overline{x}_{H2Oexhdry}} - \frac{\overline{\dot{m}}_{CO2DEF}}{M_{CO2}} \right)$$

Eq. 1036.535-1

Where:

$\overline{\dot{m}}_{fuel}$ = mean fuel mass flow rate for a given fuel map setpoint, expressed to at least the nearest 0.001 g/s.

M_C = molar mass of carbon.

w_{Cmeas} = carbon mass fraction of fuel (or mixture of test fuels) as determined in 40 CFR 1065.655(d), except that you may not use the default properties in Table 1 of 40 CFR 1065.655 to determine α, β, and w_C for liquid fuels.

$\overline{\dot{n}}_{exh}$ = the mean raw exhaust molar flow rate from which you measured emissions according to 40 CFR 1065.655.

$\overline{x}_{Ccombdry}$ = the mean concentration of carbon from fuel and any injected fluids in the exhaust per mole of dry exhaust as determined in 40 CFR 1065.655(c).

$\overline{x}_{H2Oexhdry}$ = the mean concentration of H_2O in exhaust per mole of dry exhaust as determined in 40 CFR 1065.655(c).

$\overline{\dot{m}}_{CO2DEF}$ = the mean CO_2 mass emission rate resulting from diesel exhaust fluid decomposition as determined in paragraph (b)(12) of this section. If your engine does not use diesel exhaust fluid, or if you choose not to perform this correction, set $\overline{\dot{m}}_{CO2DEF}$ equal to 0.

M_{CO2} = molar mass of carbon dioxide.

Example:

M_C = 12.0107 g/mol

w_{Cmeas} = 0.869

$\overline{\dot{n}}_{exh}$ = 25.534 mol/s

$\overline{x}_{Ccombdry}$ = 0.002805 mol/mol

$\overline{x}_{H2Oexhdry}$ = 0.0353 mol/mol

$\overline{\dot{m}}_{CO2DEF}$ = 0.0726 g/s

M_{CO2} = 44.0095 g/mol

$$\overline{\dot{m}}_{fuel} = \frac{12.0107}{0.869} \cdot \left(25.534 \cdot \frac{0.002805}{1 + 0.0353} - \frac{0.0726}{44.0095} \right) = 0.933 \text{ g/s}$$

(12) If you determine fuel-consumption rates using emission measurements with engines that utilize diesel exhaust fluid for NO_X control, correct for the mean CO_2 mass emissions resulting from diesel exhaust fluid decomposition at each fuel map setpoint using the following equation:

$$\overline{\dot{m}}_{CO2DEF} = \overline{\dot{m}}_{DEF} \cdot \frac{M_{CO2} \cdot w_{CH4N2O}}{M_{CH4N2O}}$$

Eq. 1036.535-2

Where:

$\overline{\dot{m}}_{DEF}$ = the mean mass flow rate of injected urea solution diesel exhaust fluid for a given sampling period, determined directly from the engine control module, or measured separately, consistent with good engineering judgment.

M_{CO2} = molar mass of carbon dioxide.

w_{CH4N2O} = mass fraction of urea in diesel exhaust fluid aqueous solution. Note that the subscript ''CH4N2O'' refers to urea as a pure compound and the subscript ''DEF'' refers to the aqueous urea diesel exhaust fluid as a solution of urea in water. You may use a default value of 32.5% or use good engineering judgment to determine this value based on measurement.

M_{CH4N2O} = molar mass of urea.

Example:

$\overline{\dot{m}}_{DEF}$ = 0. 304 g/s

M_{CO2} = 44.0095 g/mol

w_{CH4N2O} = 32.5% = 0.325

M_{CH4N2O} = 60.05526 g/mol

$$\overline{\dot{m}}_{CO2DEF} = 0.304 \cdot \frac{44.0095 \cdot 0.325}{60.05526} = 0.0726 \text{ g/s}$$

(c) *Fuel consumption at idle.* Determine fuel-consumption rates for engines certified for installation in vocational vehicles for each engine configuration over a series of engine-idle operating points consisting of pairs of speed and torque points as described in this paragraph (c). You may use shared data across engine configurations, consistent with good engineering judgment. Perform measurements as follows:

(1) Determine the required engine-idle operating points as follows:

(i) Select the following two speed setpoints:

(A) Engines with an adjustable warm idle speed setpoint: Minimum warm idle speed, $f_{nidlemin}$, and the maximum warm idle speed, $f_{nidlemax}$.

(B) Engines without an adjustable warm idle speed setpoint: Warm idle speed (with zero torque on the primary output shaft), f_{nidle}, and 1.15 times f_{nidle}.

(ii) Select the following two torque setpoints at each of the selected speed setpoints: 0 and 100 N·m.

(iii) You may run these four engine-idle operating points in any order.

(2) Control speed and torque as follows:

(i) *Engines with an adjustable warm idle speed setpoint.* For the warm-up in paragraph (c)(3) and the transition in paragraph (c)(4) of this section control both speed and torque. At any time prior to reaching the next engine-idle operating point, set the engine's adjustable warm idle speed setpoint to the speed setpoint of the next engine-idle operating point in the sequence. This may be done before or during the warm-up or during the transition. Near the end of the transition period control speed and torque as described in paragraph (b)(3)(i) of this section. Once the transition is complete; set the operator demand to minimum to allow the engine governor to control speed; and control torque with the dynamometer as described in paragraph (b)(3) of this section.

(ii) *Engines without an adjustable warm idle speed setpoint.* Control speed and torque with operator demand and the dynamometer for the engine-idle operating points at the higher speed setpoint as described in paragraph (b)(3) of this section. Both the speed and torque tolerances apply for these points because they are not near the engine's operating boundary and are achievable. Control speed and torque for the engine-idle operating points at the lower speed setpoint as described in paragraph (c)(2)(i) of this section except for setting the engine's adjustable warm idle speed setpoint.

(3) Warm-up the engine as described in 40 CFR 1065.510(b)(2).

(4) After concluding the warm-up procedure, linearly ramp the speed and torque setpoints over 20 seconds to operate the engine at the next engine-idle operating point from paragraph (c)(1) of this section.

(5) Operate the engine at the engine-idle operating point for (180 ± 1) seconds, and then start the test interval and record measurements using one of the following methods. You must also measure and report NO_X emissions over each test interval as described in paragraph (a)(2) of this section. If you use redundant systems for the determination of fuel consumption, for example combining measurements of dilute and raw emissions when generating your map, follow the requirements of 40 CFR 1065.201(d).

(i) *Indirect measurement of fuel flow.* Record speed and torque and measure emissions and other inputs needed to run the chemical balance in 40 CFR 1065.655(c) for a (600 ± 1) second test interval; determine the corresponding mean values for the test interval. We will use an average of indirect measurement of fuel flow with dilute sampling and direct sampling. For dilute sampling of emissions, measure background according to the provisions described in 40 CFR 1065.140, but read the background as described in paragraph (c)(7)(i) of this section. If you use batch sampling to measure background emissions, you may sample periodically into the bag over the course of multiple test intervals and read them as allowed in paragraph (b)(10)(i) of this section. If you use this provision, you must apply the same background readings to correct emissions from each of the applicable test intervals. If you use batch sampling to measure background emissions, you may sample periodically into the bag over the course of multiple test intervals and read them as allowed in paragraph (b)(10)(i) of this section. If you use this provision, you must apply the same background readings to correct emissions from each of the applicable test intervals. Note that the minimum dilution ratio requirements for PM sampling in 40 CFR 1065.140(e)(2) do not apply. We recommend minimizing the CVS flow rate to minimize errors due to background correction consistent with good engineering judgement and operational constraints such as minimum flow rate for good mixing.

(ii) *Direct measurement of fuel flow.* Record speed and torque and measure fuel consumption with a fuel flow meter for a (600 ± 1) second test interval; determine the corresponding mean values for the test interval.

(6) After completing the test interval described in paragraph (c)(5) of this section, repeat the steps in paragraphs (c)(3) to (5) of this section for all the remaining engine-idle operating points. After completing the test interval on the last engine-idle operating point, the fuel-consumption-at-idle sequence is complete.

(7) The following provisions apply for interruptions in the fuel-consumption-at-idle sequence. These provisions are intended to produce results equivalent to running the sequence without interruption.

(i) You may pause the fuel-consumption-at-idle sequence after each test interval to calibrate emission-measurement instrumentation and to read and evacuate background bag samples collected over the course of a single test interval. This provision allows you to shut-down the engine or to spend more time at the speed/torque idle setpoint after completing the test interval before transitioning to the step in paragraph (c)(3) of this section.

(ii) If an infrequent regeneration event occurs, interrupt the fuel-consumption-at-idle sequence and allow the regeneration event to finish. You may continue to operate at the engine-idle operating point where the event began or, using good engineering judgement, you may transition to another operating condition to reduce the regeneration event duration. If the event occurs during a test interval, void that test interval. Once the regeneration event is finished, restart the fuel-consumption-at-idle sequence by repeating the steps in paragraphs (c)(3) through (5) of this section for all the remaining engine-idle operating points.

(iii) You may interrupt the fuel-consumption-at-idle sequence after any of the test intervals. Restart the fuel-consumption-at-idle sequence by repeating the steps in paragraphs (c)(3) through (5) of this section for all the remaining engine-idle operating points.

(iv) If the fuel-consumption-at-idle sequence is interrupted due to test equipment or engine malfunction, correct the malfunction and restart the fuel-consumption-at-idle sequence by repeating the steps in paragraphs (c)(3) through (5) of this section for all the remaining engine-idle operating points. If the malfunction occurred during a test interval, void that test interval.

(v) If any idle test intervals are voided, repeat the steps in paragraphs (c)(3) through (5) of this section for each of the voided engine-idle operating points.

(8) Correct the measured or calculated mean fuel mass flow rate, $\overline{\dot{m}}_{fuel}$ at each of the engine-idle operating points to account for mass-specific net energy content as described in paragraph (b)(13) of this section.

(d) *Steady-state fuel maps used for cycle-average fuel mapping of the cruise cycles.* Determine fuel-consumption rates for each engine configuration over a series of steady-state engine operating points near idle as described in this paragraph (d). You may use shared data across an engine platform to the extent that the fuel-consumption rates remain valid.

(1) Perform steady-state fuel mapping as described in paragraph (b) of this section with the following exceptions:

(i) All the required steady-state engine operating points as described in paragraph (b)(1)(i) of this section are optional.

(ii) Select speed setpoints to cover the range of idle speeds expected as follows:

(A) The minimum number of speed setpoints is two.

(B) For engines with an adjustable warm idle speed setpoint, the minimum speed setpoint must be equal to the minimum warm idle speed, $f_{nidlemin}$, and the maximum speed setpoint must be equal to or greater than the maximum warm idle speed, $f_{nidlemax}$. The

minimum speed setpoint for engines without an adjustable warm idle speed setpoint, must be equal to the warm idle speed (with zero torque on the primary output shaft), f_{nidle}, and the maximum speed setpoint must be equal to or greater than 1.15 times the warm idle speed, f_{nidle}.

(iii) Select torque setpoints at each speed setpoint to cover the range of idle torques expected as follows:

(A) The minimum number of torque setpoints at each speed setpoint is three. Note that you must meet the minimum torque spacing requirements described in paragraph (b)(1)(ii) of this section.

(B) The minimum torque setpoint at each speed setpoint is zero.

(C) The maximum torque setpoint at each speed setpoint must be greater than or equal to the estimated maximum torque at warm idle (in-drive) conditions, $T_{idlemaxest}$, using the following equation. For engines with an adjustable warm idle speed setpoint, evaluate $T_{idlemaxest}$ at the maximum warm idle speed, $f_{nidlemax}$. For engines without an adjustable warm idle speed setpoint, use the warm idle speed (with zero torque on the primary output shaft), f_{nidle}.

$$T_{idlemaxest} = \left(\frac{1870 \cdot 73.30^2}{182.30^2} + \frac{1500}{73.30}\right) \cdot 1.1 = 355.07 \text{ N} \cdot \text{m}$$

Where:

$T_{fnstall}$ = the maximum engine torque at f_{nstall}.

f_{nidle} = the applicable engine idle speed as described in this paragraph (d).

f_{nstall} = the stall speed of the torque converter; use f_{ntest} or 2250 rpm, whichever is lower.

P_{acc} = accessory power for the vehicle class; use 1500 W for Vocational Light HDV, 2500 W for Vocational Medium HDV, and 3500 W for Tractors and Vocational Heavy HDV.

Example:

$T_{fnstall}$ = 1870 N·m

f_{ntest} = 1740.8 r/min = 182.30 rad/s

f_{nstall} = 1740.8 r/min = 182.30 rad/s

f_{nidle} = 700 r/min = 73.30 rad/s

P_{acc} = 1500 W

$$T_{idlemaxest} = \left(\frac{1870 \cdot 73.30^2}{182.30^2} + \frac{1500}{73.30}\right) \cdot 1.1 = 355.07 \text{ N} \cdot \text{m}$$

(2) Remove the points from the default map that are below 115% of the maximum speed and 115% of the maximum torque of the boundaries of the points measured in paragraph (d)(1) of this section.

(3) Add the points measured in paragraph (d)(1) of this section.

(e) *Carbon balance verification.* The provisions related to carbon balance verification in § 1036.543 apply to test intervals in this section.

(f) *Correction for net energy content.* Correct the measured or calculated mean fuel mass flow rate, $\overline{\dot{m}}_{fuel}$ at each engine operating condition as specified in paragraphs (b), (c), and (d) of this section to a mass-specific net energy content of a reference fuel using the following equation:

$$\overline{\dot{m}}_{fuelcor} = \overline{\dot{m}}_{fuel} \cdot \frac{E_{mfuelmeas}}{E_{mfuelCref} \cdot w_{Cref}}$$

Eq. 1036.535-4

Where:

$E_{mfuelmeas}$ = the mass-specific net energy content of the test fuel as determined in § 1036.530(b)(1).

$E_{mfuelCref}$ = the reference value of carbon-mass-specific net energy content for the appropriate fuel. Use the values shown in Table 1 of § 1036.530 for the designated fuel types, or values we approve for other fuel types.

w_{Cref} = the reference value of carbon mass fraction for the test fuel as shown in Table 1 of § 1036.530 for the designated fuels. For other fuels, use the reference carbon mass fraction of diesel fuel for engines subject to compression-ignition standards, and use the reference carbon mass fraction of gasoline for engines subject to spark-ignition standards.

Example:

$\overline{\dot{m}}_{fuel}$ = 0.933 g/s

$E_{mfuelmeas}$ = 42.7984 MJ/kgC

$E_{mfuelCref}$ = 49.3112 MJ/kgC

w_{Cref} = 0.874

$$\overline{\dot{m}}_{fuel} = 0.933 \cdot \frac{42.7984}{49.3112 \cdot 0.874} = 0.927 \text{ g/s}$$

(g) *Measured* v. *declared fuel-consumption rates.* Select fuel-consumption rates in g/s to characterize the engine's fuel maps. These declared values may not be lower than any corresponding measured values determined in paragraphs (b) through (d) of this section. This includes if you use multiple measurement methods as allowed in paragraph (b)(7) of this section. You may select any value that is at or above the corresponding measured value. These declared fuel-consumption rates, which serve as emission standards under § 1036.108, are the values that vehicle manufacturers will use for certification under 40 CFR part 1037. Note that production engines are subject to GEM cycle-weighted limits as described in § 1036.301. If you perform the carbon balance error verification in § 1036.543, for each fuel map data point:

(1) If you pass the ε_{rC} verification, you must declare fuel-consumption rates no lower than the average of the direct and indirect fuel measurements.

(2) If you pass either the ε_{aC} verification or ε_{aCrate} verification and fail the ε_{rC} verification, you must declare fuel-consumption rates no lower than the indirect fuel measurement.

(3) If you don't pass the ε_{rC}, ε_{aC}, and ε_{aCrate} verifications, you must declare fuel-consumption rates no lower than the highest rate for the direct and indirect fuel measurements.

■ 115. Amend § 1036.540 by revising paragraphs (c), (d), and (e) to read as follows:

§ 1036.540 Determining cycle-average engine fuel maps.

* * * * *

(c) *Create engine duty cycles.* Use GEM to simulate several different vehicle configurations to create transient and highway cruise engine duty cycles corresponding to each vehicle configuration, as follows:

(1) Set up GEM to simulate vehicle operation based on your engine's torque maps, steady-state fuel maps, engine minimum warm-idle speed and fuel consumption at idle as described in paragraphs (a)(1) and (2) of this section, as well as 40 CFR 1065.405(b). For engines without an adjustable warm idle speed replace minimum warm idle speed with warm idle speed, f_{nidle}.

(2) Set up GEM with transmission parameters for different vehicle service classes and vehicle duty cycles as described in Table 1 of this section. For automatic transmissions set neutral idle to ''Y'' in the vehicle file. These values are based on automatic or automated manual transmissions, but they apply for all transmission types.

Table 1 to § 1036.540—Assigned Transmission Parameters

	Light HDV and Medium HDV			Tractors and Heavy HDV, Transient Cycle		Tractors and Heavy HDV, Highway Cruise Cycle	
Transmission Type	Automatic Transmission			Automatic Transmission		Automated Manual Transmission	
Gear Number	Gear Ratio	Torque Limit (Nm), Light HDV	Torque Limit (Nm), Medium HDV	Gear Ratio	Torque Limit (Nm)	Gear Ratio	Torque Limit (Nm)
1	3.10	T_{max}	T_{max}	3.51	T_{max}	12.8	T_{max}
2	1.81			1.91		9.25	
3	1.41			1.43		6.76	
4	1.00			1.00		4.90	
5	0.71			0.74		3.58	
6	0.61			0.64		2.61	
7	—					1.89	
8						1.38	
9						1.00	
10						0.73	
Lockup Gear	3					—	

(3) Run GEM for each simulated vehicle configuration as follows:

(i) Use one of the following equations to determine tire size, $\frac{f_{ntire}}{v_{vehicle}}$, and drive axle ratio, k_a, at each of the defined engine speeds in Tables 2 through 4 of this section:

(A) Select a value for $\left[\frac{f_{ntire}}{v_{vehicle}}\right]_{[speed]}$ and solve for $k_{a[speed]}$ using the following equation:

$$k_{a[speed]} = \frac{f_{n[speed]}}{\left[\frac{f_{ntire}}{v_{vehicle}}\right]_{[speed]} \cdot k_{topgear} \cdot v_{ref}}$$

Eq. 1036.540-1

Where:

$f_{n[speed]}$ = engine's angular speed as determined in paragraph (c)(3)(ii) or (iii) of this section.

$k_{topgear}$ = transmission gear ratio in the highest available gear from Table 1 of this section (for powertrain testing use actual top gear ratio).

v_{ref} = reference speed. Use 65 mi/hr for the transient cycle and the 65 mi/hr highway cruise cycle, and use 55 mi/hr for the 55 mi/hr highway cruise cycle.

(B) Select a value for $k_{a[speed]}$ and solve for $\left[\frac{f_{ntire}}{v_{vehicle}}\right]_{[speed]}$ using the following equation:

$$\left[\frac{f_{ntire}}{v_{vehicle}}\right]_{[speed]} = \frac{f_{n[speed]}}{k_{a[speed]} \cdot k_{topgear} \cdot v_{ref}}$$

Eq. 1036.540-2

Example:

This example is for a vocational Light HDV or vocational Medium HDV with a 6-speed automatic transmission at B speed (Test 3 or 4 in Table 2 of this section).

f_{nrefB} = 1870 r/min = 31.17 r/s
k_{aB} = 4.0
$k_{topgear}$ = 0.61
v_{ref} = 65 mi/hr = 29.06 m/s

$$\left[\frac{f_{ntire}}{v_{vehicle}}\right]_B = \frac{31.17}{4.0 \cdot 0.61 \cdot 29.06} = 0.4396 \text{ rev/m}$$

(ii) Test at least eight different vehicle configurations for engines that will be installed in vocational Light HDV or vocational Medium HDV using vehicles in Table 2 of this section. For example, if your engines will be installed in vocational Medium HDV and vocational Heavy HDV, you might select Tests 2, 4, 6, and 8 of Table 2 of this section to represent vocational Heavy HDV and Tests 2, 3, 4, 6, and 9 of Table 3 of this section to represent vocational Medium HDV. You may test your engine using additional vehicle configurations with different k_a and C_{rr} values to represent a wider range of in-use vehicle configurations. For all vehicle configurations set the drive axle configuration to 4x2. For powertrain testing, set $M_{rotating}$ to 340 kg and Eff_{axle} to 0.955 for all test configurations. Set the axle ratio, k_a, and tire size,

$$\frac{f_{ntire}}{v_{vehicle}}$$

for each test configuration based on the corresponding designated engine speed (A, B, C, or f_{ntest}) at 65 mi/hr for the transient cycle and the 65 mi/hr highway cruise cycle, and at 55 mi/hr for the 55 mi/hr highway cruise cycle. These vehicle speeds apply equally for engines subject to spark-ignition standards. Use the following settings specific to each vehicle configuration:

Table 2 to § 1036.540—Vehicle Settings for Testing Vocational Light HDV or Vocational Medium HDV

	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8
C_{rr} (kg/tonne)	6.2	7.7	6.2	7.7	6.2	7.7	6.2	7.7
$\frac{f_{ntire}}{v_{vehicle}}$ and k_a for CI engines at engine speed	A	A	B	B	C	C	Maximum test speed	Maximum test speed
$\frac{f_{ntire}}{v_{vehicle}}$ and k_a for SI engines at engine speed	Minimum NTE exclusion speed	Minimum NTE exclusion speed	A	A	B	B	C	C
GEM Regulatory Subcategory	LHD	MHD	LHD	MHD	LHD	MHD	LHD	MHD
M (kg)[a]	7,257	11,408	7,257	11,408	7,257	11,408	7,257	11,408
C_dA[a]	3.4	5.4	3.4	5.4	3.4	5.4	3.4	5.4

[a]Note that M and C_dA are applicable for powertrain testing only since GEM contains default M and C_dA values for each vocational regulatory category.

(iii) Test nine different vehicle configurations for engines that will be installed in vocational Heavy HDV and for tractors that are not heavy-haul tractors. Test six different test configurations for heavy-haul tractors. You may test your engines for additional configurations with different k_a, C_dA, and C_{rr} values to represent a wider range of in-use vehicle configurations. Set C_{rr} to 6.9 for all nine defined test configurations. For class 7 and 8 vehicle configurations set the drive axle configuration to 4x2 and 6x4 respectively. For powertrain testing, set Eff_{axle} to 0.955 for all test configurations. Set the axle ratio, k_a, and tire size,

$$\frac{f_{ntire}}{v_{vehicle}}$$

for each test configuration based on the corresponding designated engine speed (B, f_{ntest}, or the minimum NTE exclusion speed as determined in 40 CFR 86.1370(b)(1)) at 65 mi/hr for the transient duty cycle and the 65 mi/hr highway cruise duty cycle, and at 55 mi/hr for the 55 mi/hr highway cruise duty cycle. Use the settings specific to each test configuration as shown in Table 3 or Table 4 of this section, as appropriate. Engines subject to testing under both Table 3 and Table 4 of this section need not repeat overlapping test configurations, so complete fuel mapping requires testing 12 (not 15) test configurations for those engines. However, this does not apply if you choose to create two separate maps from the vehicles configurations defined in Table 3 and Table 4 of this section. Note that $M_{rotating}$ is needed for powertrain testing but not for engine testing. Tables 3 and 4 follow:

Table 3 of § 1036.540—Vehicle Settings for Testing

General Purpose Tractors and Vocational Heavy HDV

	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8	Test 9
C_dA	5.4	4.7	4.0	5.4	4.7	4.0	5.4	4.7	4.0
$M_{rotating}$ (kg)	1,021	794	794	1,021	794	794	1,021	794	794
$\frac{f_{ntire}}{v_{vehicle}}$ and k_a at engine speed	Minimum NTE exclusion speed	Minimum NTE exclusion speed	Minimum NTE exclusion speed	B	B	B	Maximum test speed	Maximum test speed	Maximum test speed
GEM Regulatory Subcategory	C8_SC_HR	C8_DC_MR	C7_DC_MR	C8_SC_HR	C8_DC_MR	C7_DC_MR	C8_SC_HR	C8_DC_MR	C7_DC_MR
Vehicle Weight Reduction (lbs)[a]	0	13,275	6,147	0	13,275	6,147	0	13,275	6,147
M (kg)[b]	31,978	25,515	19,051	31,978	25,515	19,051	31,978	25,515	19,051

[a]Note that vehicle weight reduction is not applicable for powertrain testing, since M is the total mass that is to be simulated.

[b]Note that M is applicable for powertrain testing only since GEM contains default M values for each vocational regulatory category.

Table 4 of § 1036.540—Vehicle Settings for Testing Heavy-Haul Tractors

	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6
C_dA	5.0	5.4	5.0	5.4	5.0	5.4
$M_{rotating}$ (kg)	1,021	1,021	1,021	1,021	1,021	1,021
$\frac{f_{ntire}}{v_{vehicle}}$ and k_a at engine speed	Minimum NTE exclusion speed	Minimum NTE exclusion speed	B	B	Maximum test speed	Maximum test speed
GEM Regulatory Subcategory	C8_HH	C8_SC_HR	C8_HH	C8_SC_HR	C8_HH	C8_SC_HR
M (kg)	53,751	31,978	53,751	31,978	53,751	31,978

(iv) If the engine will be installed in a combination of vehicles defined in paragraphs (ii) and (iii) of this section, use good engineering judgment to select at least nine test configurations from Table 2 and Table 3 of this section that best represent the range of vehicles your engine will be sold in. If there are not nine representative configurations you must add vehicles, that you define, to reach a total of at least nine vehicles. For example, if your engines will be installed in vocational Medium HDV and vocational Heavy HDV, select Tests 2, 4, 6, and 8 of Table 2 of this section to represent Medium HDV and Tests 3, 6, and 9 of Table 3 of this section to represent vocational Heavy HDV and add two more vehicles that you define. You may test your engine using additional vehicle configurations with different k_a and C_{rr} values to represent a wider range of in-use vehicle configurations.

(v) Use the defined values in Tables 1 through 4 of this section to set up GEM with the correct regulatory subcategory and vehicle weight reduction, if applicable, to achieve the target vehicle mass, M, for each test.

(4) Use the GEM output of instantaneous engine speed and engine flywheel torque for each of the vehicle configurations to generate a 10 Hz transient duty cycle corresponding to each vehicle configuration operating over each vehicle duty cycle.

(d) *Test the engine with GEM cycles.* Test the engine over each of the transient engine duty cycles generated in paragraph (c) of this section as follows:

(1) Determine the sequence of engine duty cycles (both required and optional) for the cycle-average-fuel-mapping sequence as follows:

(i) Sort the list of engine duty cycles into three separate groups by vehicle duty cycle; transient vehicle duty cycle, 55 mi/hr highway cruise duty cycle, and the 65 mi/hr highway cruise duty cycle.

(ii) Within each group of engine duty cycles derived from the same vehicle duty cycle, order the duty cycles as follows: Select the engine duty cycle with the highest reference cycle work; followed by the cycle with the lowest cycle work; followed by the cycle with next highest cycle work; followed by the cycle with the next lowest cycle work; until all the cycles are selected.

(iii) For each engine duty cycle, preconditioning cycles will be needed to start the cycle-average-fuel-mapping sequence.

(A) For the first and second cycle in each sequence, the two preconditioning cycles are the first cycle in the sequence, the transient vehicle duty cycle with the highest reference cycle work. This cycle is run twice for preconditioning prior to starting the sequence for either of the first two cycles.

(B) For all other cycles, the two preconditioning cycles are the previous two cycles in the sequence.

(2) If the engine has an adjustable warm idle speed setpoint, set it to its minimum value, $f_{nidlemin}$.

(3) During each test interval, control speed and torque to meet the cycle validation criteria in 40 CFR 1065.514, except as noted in this paragraph (d)(3). If the range of reference speeds is less than 10 percent of the mean reference speed, you only need to meet the standard error of estimate in Table 2 of 40 CFR 1065.514 for the speed regression.

(4) Warm-up the engine as described in 40 CFR 1065.510(b)(2).

(5) Transition between duty cycles as follows:

(i) For transient duty cycles, start the next cycle within 5 seconds after the conclusion of the preceeding cycle.

(ii) For cruise cycles, linearly ramp to the next cycle over 5 seconds and stabilize for 15 seconds prior to starting the next cycle.

(6) Operate the engine over the engine duty cycle and record measurements using one of the methods described in (d)(6)(i) or (ii) of this section. You must also measure and report NO_X emissions over each test interval as described in paragraph (a)(2) of this section. If you use redundant systems for the determination of fuel consumption, for example combining measurements of dilute and raw emissions when generating your map, follow the requirements of 40 CFR 1065.201(d).

(i) *Indirect measurement of fuel flow.* Record speed and torque and measure emissions and other inputs needed to run the chemical balance in 40 CFR 1065.655(c) for the test interval defined by the first engine duty cycle; determine the corresponding mean values for the test interval. We will use an average of indirect measurement of fuel flow with dilute sampling and direct sampling. For dilute sampling of emissions, in addition to the background measurement provisions described in 40 CFR 1065.140, you may do the following:

(A) Measure background as described in § 1036.535(b)(7)(i)(A) but read the background as described in paragraph (d)(9)(i) of this section.

(B) Measure background as described in § 1036.535(b)(7)(i)(B) but read the background as described in paragraph (d)(9)(i) of this section.

(ii) *Direct measurement of fuel flow.* Record speed and torque and measure fuel consumption with a fuel flow meter for the test interval defined by the first engine duty cycle; determine the corresponding mean values for the test interval.

(7) Repeat the steps in paragraph (d)(6) of this section for all the remaining engine duty cycles.

(8) Repeat the steps in paragraphs (d)(4) through (7) of this section for all the applicable groups of duty cycles (*e.g.,* transient vehicle duty cycle, 55 mi/hr highway cruise duty cycle, and the 65 mi/hr highway cruise duty cycle).

(9) The following provisions apply for interruptions in the cycle-average-fuel-mapping sequence. These provisions are intended to produce results equivalent to running the sequence without interruption.

(i) You may pause the cycle-average-fuel-mapping sequence after each test interval to calibrate emission-measurement instrumentation, to read and evacuate background bag samples collected over the course of multiple test intervals, or to sample the dilution air for background emissions. This provision requires you to shut-down the engine during the pause. If the pause is longer than 30 minutes, restart the engine and restart the cycle-average-fuel-mapping sequence at the step in paragraph (d)(4) of this section. Otherwise, restart the engine and restart the cycle-average-fuel-mapping sequence at the step in paragraph (d)(5) of this section.

(ii) If an infrequent regeneration event occurs, interrupt the cycle-average-fuel-mapping sequence and allow the regeneration event to finish. You may continue to operate the engine over the engine duty cycle where the event began or, using good engineering judgement, you may transition to another operating condition to reduce the regeneration event duration.

(A) Determine which cycles in the sequence to void as follows:

(*1*) If the regeneration event began during a test interval, the cycle associated with that test interval must be voided.

(*2*) If you used dilute sampling to measure emissions and you used batch sampling to measure background emissions that were sampled periodically into the bag over the course of multiple test intervals and you are unable to read the background bag (*e.g.,* sample volume too small), void all cycles associated with that background bag.

(*3*) If you used dilute sampling to measure emissions and you used the option to sample periodically from the dilution air and you did not meet all the requirements for this option as described in paragraph (d)(6)(i)(B) of this section, void all cycles associated with those background readings.

(*4*) If the regeneration event began during a non-test-interval period of the sequence and the provisions in paragraphs (d)(9)(ii)(A)(*2*) and (*3*) of this section do not apply, you do not need to void any cycles.

(B) Determine the cycle to restart the sequence. Identify the cycle associated with the last valid test interval. The next cycle in the sequence is the cycle to be used to restart the sequence.

(C) Once the regeneration event is finished, restart the sequence at the cycle determined in paragraph (d)(9)(ii)(B) of this section instead of the first cycle of the sequence. If the engine is not already warm, restart the sequence at paragraph (d)(4) of this section. Otherwise, restart at paragraph (d)(5) of this section.

(iii) If the cycle-average-fuel-mapping sequence is interrupted due to test equipment or engine malfunction, correct the malfunction and follow the steps in paragraphs (d)(9)(ii)(A) through (C) of this section to restart the sequence. Treat the detection of the malfunction as the beginning of the regeneration event.

(iv) If any test interval in the cycle-average-fuel-mapping sequence is voided, you must rerun that test interval as described in this paragraph (d)(9)(iv). You may rerun the whole sequence or any contiguous part of the sequence. If you end up with multiple valid test intervals for a given cycle, use the last valid test interval for determining the cycle-average fuel map. If the engine has been shut-down for more than 30 minutes or if it is not already warm, restart the sequence at paragraph (d)(4) of this section. Otherwise, restart at paragraph (d)(5) of this section. Repeat the steps in paragraphs (d)(6) and (d)(7) of this section until you complete the whole sequence or part of the sequence.

The following examples illustrate possible scenarios for completing only part of the sequence:

(A) If you voided only the test interval associated with the fourth cycle in the sequence, you may restart the sequence using the second and third cycles as the preconditioning cycles and stop after completing the test interval associated with the fourth cycle.

(B) If you voided the test intervals associated with the fourth and sixth cycles, you may restart the sequence using the second and third cycles as the preconditioning cycles and stop after completing the test interval associated with the sixth cycle. If the test interval associated with the fifth cycle in this sequence was valid, it must be used for determining the cycle-average fuel map instead of the original one.

(10) For plug-in hybrid engines, precondition the battery and then complete all back-to-back tests for each test configuration according to 40 CFR 1066.501 before moving to the next test configuration.

(11) You may send signals to the engine controller during the test, such as current transmission gear and vehicle speed, if that allows engine operation during the test to better represent in-use operation.

(12) For hybrid powertrains with no plug-in capability, correct for the net energy change of the energy storage device as described in 40 CFR 1066.501. For plug-in hybrid engines, follow 40 CFR 1066.501 to determine End-of-Test for charge-depleting operation; to do this, you must get our advance approval for a utility factor curve. We will approve your utility factor curve if you can show that you created it from sufficient in-use data of vehicles in the same application as the vehicles in which the PHEV engine will be installed.

(13) Calculate the fuel mass flow rate, m_{fuel}, for each duty cycle using one of the following equations:

(i) Determine fuel-consumption rates using emission measurements from the raw or diluted exhaust, calculate the mass of fuel for each duty cycle, $m_{fuel[cycle]}$, as follows:

(A) For calculations that use continuous measurement of emissions and continuous CO_2 from urea, calculate $m_{fuel[cycle]}$ using the following equation:

$$m_{\mathrm{fuel[cycle]}} = \frac{M_{\mathrm{C}}}{w_{\mathrm{Cmeas}}} \cdot \left(\sum_{i=1}^{N} \left(\dot{n}_{\mathrm{exh}i} \cdot \frac{x_{\mathrm{Ccombdry}i}}{1 + x_{\mathrm{H2Oexhdry}i}} \cdot \Delta t \right) - \frac{1}{M_{\mathrm{CO2}}} \sum_{i=1}^{N} \left(\dot{m}_{\mathrm{CO2DEF}i} \cdot \Delta t \right) \right)$$

Eq. 1036.540-3

Where:

M_C = molar mass of carbon.

w_{Cmeas} = carbon mass fraction of fuel (or mixture of test fuels) as determined in 40 CFR 1065.655(d), except that you may not use the default properties in Table 1 of 40 CFR 1065.655 to determine α, β, and w_C for liquid fuels.

i = an indexing variable that represents one recorded emission value.

N = total number of measurements over the duty cycle.

$\dot{n}_{exh}$ = exhaust molar flow rate from which you measured emissions.

$x_{Ccombdry}$ = amount of carbon from fuel and any injected fluids in the exhaust per mole of dry exhaust as determined in 40 CFR 1065.655(c).

$x_{H2Oexhdry}$ = amount of H_2O in exhaust per mole of exhaust as determined in 40 CFR 1065.655(c).

$\Delta t = 1/f_{record}$.

M_{CO2} = molar mass of carbon dioxide.

$\dot{m}_{CO2DEFi}$ = mass emission rate of CO_2 resulting from diesel exhaust fluid decomposition over the duty cycle as determined from § 1036.535(b)(10). If your engine does not utilize diesel exhaust fluid for emission control, or if you choose not to perform this correction, set $\dot{m}_{CO2DEFi}$ equal to 0.

Example:

M_C = 12.0107 g/mol
w_{Cmeas} = 0.867
N = 6680
$\dot{n}_{exh1}$ = 2.876 mol/s
$\dot{n}_{exh2}$ = 2.224 mol/s
$x_{Ccombdry1} = 2.61 \cdot 10^{-3}$ mol/mol
$x_{Ccombdry2} = 1.91 \cdot 10^{-3}$ mol/mol
$x_{H2Oexh1} = 3.53 \cdot 10^{-2}$ mol/mol
$x_{H2Oexh2} = 3.13 \cdot 10^{-2}$ mol/mol
f_{record} = 10 Hz
Δt = 1/10 = 0.1 s
M_{CO2} = 44.0095 g/mol
$\dot{m}_{CO2DEF1}$ = 0.0726 g/s
$\dot{m}_{CO2DEF2}$= 0.0751 g/s

$$m_{\text{fueltransient}} = \frac{12.0107}{0.867} \cdot \left(\begin{array}{l} \left(\begin{array}{l} 2.876 \cdot \frac{2.61 \cdot 10^{-3}}{1 + 3.53 \cdot 10^{-2}} \cdot 0.1 + \\ 2.224 \cdot \frac{1.91 \cdot 10^{-3}}{1 + 3.13 \cdot 10^{-2}} \cdot 0.1 + \\ \ldots + \dot{n}_{\text{exh6680}} \cdot \frac{x_{\text{Ccombdr6680}}}{1 + x_{\text{H2Oexhdry6680}}} \cdot \Delta t_{6680} \end{array} \right) \\ - \frac{1}{44.0095} \cdot \left(0.0726 \cdot 1.0 + 0.0751 \cdot 1.0 + \ldots + \dot{m}_{\text{CO2DEF6680}} \cdot \Delta t_{6680} \right) \end{array} \right)$$

$M_{\text{fueltransient}}$ = 1619.6 g

(B) If you measure batch emissions and continuous CO_2 from urea, calculate $m_{\text{fuel[cycle]}}$ using the following equation:

$$m_{\text{fuel[cycle]}} = \frac{M_{\text{C}}}{w_{\text{Cmeas}}} \cdot \left(\frac{\overline{x}_{\text{Ccombdry}}}{1 + \overline{x}_{\text{H2Oexhdry}}} \cdot \sum_{i=1}^{N} \left(\dot{n}_{\text{exh}i} \cdot \Delta t \right) - \frac{1}{M_{\text{CO2}}} \sum_{i=1}^{N} \left(\dot{m}_{\text{CO2DEF}i} \cdot \Delta t \right) \right)$$

Eq. 1036.540-4

(C) If you measure continuous emissions and batch CO_2 from urea, calculate $m_{\text{fuel[cycle]}}$ using the following equation:

$$m_{\text{fuel[cycle]}} = \frac{M_{\text{C}}}{w_{\text{Cmeas}}} \cdot \left(\sum_{i=1}^{N} \left(\dot{n}_{\text{exh}i} \cdot \frac{x_{\text{Ccombdry}i}}{1 + x_{\text{H2Oexhdry}i}} \cdot \Delta t \right) - \frac{m_{\text{CO2DEF}}}{M_{\text{CO2}}} \right)$$

Eq. 1036.540-5

(D) If you measure batch emissions and batch CO_2 from urea, calculate $m_{\text{fuel[cycle]}}$ using the following equation:

$$m_{\text{fuel[cycle]}} = \frac{M_{\text{C}}}{w_{\text{Cmeas}}} \cdot \left(\frac{\overline{x}_{\text{Ccombdry}}}{1 + \overline{x}_{\text{H2Oexhdry}}} \cdot \sum_{i=1}^{N} \left(\dot{n}_{\text{exh}i} \cdot \Delta t \right) - \frac{m_{\text{CO2DEF}}}{M_{\text{CO2}}} \right)$$

Eq. 1036.540-6

(ii) Manufacturers may choose to measure fuel mass flow rate. Calculate the mass of fuel for each duty cycle, $m_{\text{fuel[cycle]}}$, as follows:

$$m_{\text{fuel}} = \sum_{i=1}^{N} \dot{m}_{\text{fuel}i} \cdot \Delta t$$

Eq. 1036.540-7

Where:

i = an indexing variable that represents one recorded value.

N = total number of measurements over the duty cycle. For batch fuel mass measurements, set $N = 1$.

$\dot{m}_{\text{fuel}i}$ = the fuel mass flow rate, for each point, i, starting from $i = 1$.

$\Delta t = 1/f_{\text{record}}$.

f_{record} = the data recording frequency.

Example:

$N = 6680$
$\dot{m}_{fuel1} = 1.856$ g/s
$\dot{m}_{fuel2} = 1.962$ g/s
$f_{record} = 10$ Hz
$\Delta t = 1/10 = 0.1$ s
$m_{fueltransient} = (1.856 + 1.962 + . . . + \dot{m}_{fuel6680}) \cdot 0.1$
$m_{fueltransient} = 111.95$ g

(14) The provisions related to carbon balance verification in § 1036.543 apply to test intervals in this section.

(15) Correct the measured or calculated fuel mass flow rate, m_{fuel} for each test result to a mass-specific net energy content of a reference fuel as described in § 1036.535(e), replacing $\overline{m}_{fuel}$ with m_{fuel} in Eq. 1036.535–4.

(16) For engines designed for plug-in hybrid electric vehicles, the mass of fuel for each cycle, $m_{fuel[cycle]}$, is the utility factor-weighted fuel mass. This is done by calculating m_{fuel} for the full charge-depleting and charge-sustaining portions of the test and weighting the results, using the following equation:

$$m_{fuel[cycle],plug\text{-}in} = m_{fuel[cycle],CD} \cdot UF_{D,CD} + m_{fuel[cycle],CS} \cdot \left(1 - UF_{D,CD}\right)$$

Eq. 1036.540-8

Where:

$m_{fuel[cycle],CD}$ = total mass of fuel for all the tests in the charge-depleting portion of the test.

$UF_{D,CD}$ = utility factor fraction at distance D_{CD} as determined by interpolating the approved utility factor curve.

$m_{fuel[cycle],CS}$ = total mass of fuel for all the tests in the charge-sustaining portion of the test.

$$D_{CD} = \sum_{i=1}^{N} \left(v_i \cdot \Delta t_i\right)$$

Eq. 1036.540-9

Where:

v = vehicle velocity at each time step. For tests completed under this section, v is the vehicle velocity in the GEM duty-cycle file. For tests under 40 CFR 1037.550, v is the vehicle velocity as determined by Eq. 1037.550–1. Note that this should include complete and incomplete charge-depleting tests.

(e) *Determine GEM inputs.* Use the results of engine testing in paragraph (d) of this section to determine the GEM inputs for the transient duty cycle and optionally for each of the highway cruise cycles corresponding to each simulated vehicle configuration as follows:

(1) Your declared fuel mass consumption, $m_{fueltransient}$. Using the calculated fuel mass consumption values described in paragraph (d) of this section, declare values using the method described in § 1036.535(g).

(2) Engine output speed per unit vehicle speed,

$$\frac{\overline{f}_{nengine}}{\overline{v}_{vehicle}}$$

by taking the average engine speed measured during the engine test while the vehicle is moving and dividing it by the average vehicle speed provided by GEM. Note that the engine cycle created by GEM has a flag to indicate when the vehicle is moving.

(3) Positive work determined according to 40 CFR 1065, $W_{transient}$, by using the engine speed and engine torque measured during the engine test while the vehicle is moving. Note that the engine cycle created by GEM has a flag to indicate when the vehicle is moving.

(4) The following table illustrates the GEM data inputs corresponding to the different vehicle configurations:

Table 5 of § 1036.540—Example test result output matrix for Class 8 vocational vehicles

	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8	Test 9
$m_{fueltransient}$									
$\frac{\overline{f}_{nengine}}{\overline{v}_{engine}}$									
$W_{transient}$									

(5) The engine idle speed and torque, by taking the average engine speed and torque measured during the engine test while the vehicle is not moving. Note that the engine cycle created by GEM has a flag to indicate when the vehicle is moving.

■ 116. Add § 1036.543 to read as follows:

§ 1036.543 Carbon balance error verification.

A carbon balance error verification compares independent assessments of the flow of carbon through the system (engine plus aftertreatment). We will, and you may optionally, verify carbon balance error according to 40 CFR part 1065.543. This applies to all test intervals in § 1036.535 (b), (c), and (d); § 1036.540; and 40 CFR 1037.550.

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■ 117. Amend § 1036.701 by revising paragraph (j) to read as follows:

§ 1036.701 General provisions.

* * * * *

(j) Credits you generate with compression-ignition engines in 2020 and earlier model years may be used in model year 2021 and later as follows:

(1) For credit-generating engines certified to the tractor engine standards in § 1036.108, you may use credits calculated relative to the tractor engine standards.

(2) For credit-generating engines certified to the vocational engine standards in § 1036.108, you may use credits calculated relative to the emission levels in the following table:

TABLE 1 PARAGRAPH (j)—EMISSION LEVELS FOR CREDIT CALCULATION

Medium heavy-duty engines	Heavy heavy-duty engines
558 g/hp·hr	525 g/hp·hr.

* * * * *

■ 118. Amend § 1036.705 by revising paragraph (b)(5) to read as follows:

§ 1036.705 Generating and calculating emission credits.

* * * * *

(b) * * *

(5) You may generate CO_2 emission credits from a model year 2021 or later medium heavy-duty engine family subject to spark-ignition standards for exchanging with other engine families only if the engines in the family are gasoline-fueled. You may generate CO_2 credits from non-gasoline engine families only for the purpose of offsetting CH_4 and/or N_2O emissions within the same engine family as described in paragraph (d) of this section.

* * * * *

■ 119. Amend § 1036.801 by revising the definitions for ''Heavy-duty vehicle'' and ''Hybrid'' and adding definitions for ''Hybrid engine'' and ''Mild hybrid'' in alphabetical order to read as follows:

§ 1036.801 Definitions.

* * * * *

Heavy-duty vehicle means any motor vehicle above 8,500 pounds GVWR. An incomplete vehicle is also a heavy-duty vehicle if it has a curb weight above 6,000 pounds or a basic vehicle frontal area greater than 45 square feet. *Curb weight* and *Basic vehicle frontal area* have the meaning given in 40 CFR 86.1803.

Hybrid means an engine or powertrain that includes energy storage features other than a conventional battery system or conventional flywheel. Supplemental electrical batteries and hydraulic accumulators are examples of hybrid energy storage systems. Note that certain provisions in this part treat hybrid engines and hybrid powertrains intended for vehicles that include regenerative braking different than those intended for vehicles that do not include regenerative braking.

Hybrid engine means a hybrid system with features for storing and recovering energy that are integral to the engine or are otherwise upstream of the vehicle's transmission. Hybrid features connected to the front end of the engine are known as P0, and hybrid features connected to the crankshaft are known as P1.

* * * * *

Mild hybrid means a hybrid engine or hybrid powertrain with regenerative braking capability where the system recovers less than 20 percent of the total braking energy over the transient cycle defined in Appendix I of 40 CFR part 1037.

* * * * *

■ 120. Revise § 1036.805 to read as follows:

§ 1036.805 Symbols, abbreviations, and acronyms.

The procedures in this part generally follow either the International System of Units (SI) or the United States customary units, as detailed in NIST Special Publication 811 (incorporated by reference in § 1036.810). See 40 CFR 1065.20 for specific provisions related to these conventions. This section summarizes the way we use symbols, units of measure, and other abbreviations.

(a) *Symbols for chemical species.* This part uses the following symbols for chemical species and exhaust constituents:

Symbol	Species
C	carbon.
CH_4	methane.
CH_4N_2O	urea.
CO	carbon monoxide.
CO_2	carbon dioxide.
H_2O	water.
HC	hydrocarbon.
NMHC	nonmethane hydrocarbon.
NMHCE	nonmethane hydrocarbon equivalent.
NO	nitric oxide.
NO_2	nitrogen dioxide.
NO_X	oxides of nitrogen.
N_2O	nitrous oxide.
PM	particulate matter.

(b) *Symbols for quantities.* This part uses the following symbols and units of measure for various quantities:

Symbol	Quantity	Unit	Unit symbol	Unit in terms of SI base units
α	atomic hydrogen-to-carbon ratio	mole per mole	mol/mol	1.
A	area	square meter	m^2	m^2.
β	atomic oxygen-to-carbon ratio	mole per mole	mol/mol	1.
C_dA	drag area	meter squared	m^2	m^2.
C_{rr}	coefficient of rolling resistance	kilogram per metric ton	kg/tonne	10^{-3}.
D	distance	miles or meters	mi or m	m.
ε	efficiency.			
ε	Difference or error quantity.			
e	mass weighted emission result	grams/ton-mile	g/ton-mi	g/kg-km.
Eff	efficiency.			
E_m	mass-specific net energy content	megajoules/kilogram	MJ/kg	$m^2 \cdot s^{-2}$.
f_n	angular speed (shaft)	revolutions per minute	r/min	$\pi \cdot 30 \cdot s^{-1}$.
g	gravitational acceleration	meters per second squared	m/s^2	$m \cdot s^{-2}$.
i	indexing variable.			
k_a	drive axle ratio			1.
$k_{topgear}$	highest available transmission gear.			
m	mass	pound mass or kilogram	lbm or kg	kg.
M	molar mass	gram per mole	g/mol	$10^{-3} \cdot kg \cdot mol^{-1}$.
M	vehicle mass	kilogram	kg	kg.
$M_{rotating}$	inertial mass of rotating components.	kilogram	kg	kg.
N	total number in a series.			
P	power	kilowatt	kW	$10^3 \cdot m^2 \cdot kg \cdot s^{-3}$.
ρ	mass density	kilogram per cubic meter	kg/m^3	$m^{-3} \cdot kg$.
r	tire radius	meter	m	m.
σ	standard deviation.			
T	torque (moment of force)	newton meter	N·m	$m^2 \cdot kg \cdot s^{-2}$.
t	time	second	s	s.
Δt	time interval, period, 1/frequency	second	s	s.

Symbol	Quantity	Unit	Unit symbol	Unit in terms of SI base units
UF	utility factor.			
v	speed	miles per hour or meters persecond.	mi/hr or m/s	$m \cdot s^{-1}$.
W	work	kilowatt-hour	kW·hr	$3.6 \cdot m^2 \cdot kg \cdot s^{-1}$.
w_C	carbon mass fraction	gram/gram	g/g	1.
w_{CH4N2O}	urea mass fraction	gram/gram	g/g	1.
x	amount of substance mole fraction	mole per mole	mol/mol	1.
x_b	brake energy fraction.			
x_{bl}	brake energy limit.			

(c) *Superscripts.* This part uses the following superscripts for modifying quantity symbols:

Superscript	Meaning
overbar (such as $\bar{y}$)	arithmetic mean.
overdot (such as $\dot{y}$)	quantity per unit time.

(d) *Subscripts.* This part uses the following subscripts for modifying quantity symbols:

Subscript	Meaning
65	65 miles per hour.
A	A speed.
a	absolute (*e.g.,* absolute difference or error).
acc	accessory.
app	approved.
axle	axle.
B	B speed.
C	C speed.
C	carbon mass.
Ccombdry	carbon from fuel per mole of dry exhaust.
CD	charge-depleting.
CO2DEF	CO_2 resulting from diesel exhaust fluid decomposition.
comb	combustion.
comp	composite.
cor	corrected.
CS	charge-sustaining.
cycle	test cycle.
DEF	diesel exhaust fluid.
engine	engine.
exh	raw exhaust.
front	frontal.
fuel	fuel.
H2Oexhaustdry	H_2O in exhaust per mole of exhaust.
hi	high.
i	an individual of a series.
idle	idle.
m	mass.
max	maximum.
mapped	mapped.
meas	measured quantity.
neg	negative.
pos	positive.
r	relative (*e.g.,* relative difference or error).
rate	rate (divided by time).
rated	rated.
record	record.
ref	reference quantity.
speed	speed.
stall	stall.
test	test.
tire	tire.
transient	transient.
μ	vector.
vehicle	vehicle.

(e) *Other acronyms and abbreviations.* This part uses the following additional abbreviations and acronyms:

ABT	averaging, banking, and trading.
AECD	auxiliary emission control device.

ASTM	American Society for Testing and Materials.
BTU	British thermal units.
CD	charge-depleting.
CFR	Code of Federal Regulations.
CI	compression ignition.
COV	coefficient of variation.
CS	charge-sustaining.
DEF	diesel exhaust fluid.
DF	deterioration factor.
DOT	Department of Transportation.
E85	gasoline blend including nominally 85 percent denatured ethanol.
EPA	Environmental Protection Agency.
FCL	Family Certification Level.
FEL	Family Emission Limit.
GEM	Greenhouse gas Emissions Model.
g/hp·hr	grams per brake horsepower-hour.
GVWR	gross vehicle weight rating.
HDV	heavy-duty vehicle.
LPG	liquefied petroleum gas.
NARA	National Archives and Records Administration.
NHTSA	National Highway Traffic Safety Administration.
NTE	not-to-exceed.
RESS	rechargeable energy storage system.
RMC	ramped-modal cycle.
rpm	revolutions per minute.
SCR	Selective catalytic reduction.
SI	spark ignition.
U.S	United States.
U.S.C	United States Code.

(f) *Constants.* This part uses the following constants:

Symbol	Quantity	Value
g	gravitational constant.	9.81 $m \cdot s^{-2}$

(g) *Prefixes.* This part uses the following prefixes to define a quantity:

Symbol	Quantity	Value
μ	micro	10^{-6}
m	milli	10^{-3}
c	centi	10^{-2}
k	kilo	10^{3}
M	mega	10^{3}

■ 121. Revise § 1036.810 to read as follows:

§ 1036.810 Incorporation by reference.

Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Environmental Protection Agency must publish a document in the **Federal Register** and the material must be available to the public. All approved material is available for inspection at U.S. EPA, Air and Radiation Docket and Information Center, WJC West Building, Room 3334, 1301 Constitution Ave. NW, Washington, DC 20460, *www.epa.gov/dockets*, (202) 202–1744, and is available from the sources listed in the following paragraphs of this section. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email *fedreg.legal@nara.gov*, or go to *www.archives.gov/federal-register/cfr/ibr-locations.html*.

(a) American Society for Testing and Materials, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428–2959, (877) 909–2786, *www.astm.org/*.

(1) ASTM D3588–98 (Reapproved 2017) Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels, approved April 1, 2017, (''ASTM D3588''), IBR approved for § 1036.530(b).

(2) ASTM D4809–13, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), approved May 1, 2013, (''ASTM D4809''), IBR approved for § 1036.530(b).

(b) National Institute of Standards and Technology, 100 Bureau Drive, Stop 1070, Gaithersburg, MD 20899–1070, (301) 975–6478, or *www.nist.gov*.

(1) NIST Special Publication 811, Guide for the Use of the International System of Units (SI), 2008 Edition, March 2008, IBR approved for § 1036.805.

(2) [Reserved]

Appendix I to Part 1036—[Redesignated]

■ 122. Redesignate Appendix I to part 1036 as Appendix III to part 1036 and add a new Appendix I to part 1306 to read as follows:

Appendix I to Part 1036—Summary of Previous Emission Standards

The following standards, which EPA originally adopted under 40 CFR part 85 or part 86, apply to compression-ignition engines produced before model year 2007 and to spark-ignition engines produced before model year 2008:

(a) *Smoke.* Smoke standards applied for compression-ignition engines based on opacity measurement using the test procedures in 40 CFR part 86, subpart I, as follows:

(1) Engines were subject to the following smoke standards for model years 1970 through 1973:

(i) 40 percent during the engine acceleration mode.

(ii) 20 percent during the engine lugging mode.

(2) The smoke standards in 40 CFR 86.11 started to apply in model year 1974.

(b) *Idle CO.* A standard of 0.5 percent of exhaust gas flow at curb idle applied through model year 2016 to the following engines:

(1) Spark-ignition engines with aftertreatment starting in model year 1987. This standard applied only for gasoline-fueled engines through model year 1997. Starting in model year 1998, the same standard applied for engines fueled by methanol, LPG, and natural gas. The idle CO standard no longer applied for engines certified to meet onboard diagnostic requirements starting in model year 2005.

(2) Methanol-fueled compression-ignition engines starting in model year 1990. This standard also applied for natural gas and LPG engines starting in model year 1997. The idle CO standard no longer applied for engines certified to meet onboard diagnostic requirements starting in model year 2007.

(c) *Crankcase emissions.* The requirement to design engines to prevent crankcase emissions applied starting with the following engines:

(1) Spark-ignition engines starting in model year 1968. This standard applied only for gasoline-fueled engines through model year 1989, and applied for spark-ignition engines using other fuels starting in model year 1990.

(2) Naturally aspirated diesel-fueled engines starting in model year 1985.

(3) Methanol-fueled compression-ignition engines starting in model year 1990.

(4) Naturally aspirated gaseous-fueled engines starting in model year 1997, and all other gaseous-fueled engines starting in 1998.

(d) *Early steady-state standards.* The following criteria standards applied to heavy-duty engines based on steady-state measurement procedures:

TABLE 1 TO APPENDIX I—EARLY STEADY-STATE EMISSION STANDARDS FOR HEAVY-DUTY ENGINES

Model year	Fuel	Pollutant		
		HC	NO_X + HC	CO
1970–1973	gasoline	275 ppm		1.5 volume percent.
1974–1978	gasoline and diesel		16 g/hp·hr	40 g/hp·hr
1979–1984 [a]	gasoline and diesel		5 g/hp·hr for diesel 0 g/hp·hr for gasoline.	25 g/hp·hr

[a] An optional NO_X + HC standard of 10 g/hp·hr applied in 1979 through 1984 in conjunction with a separate HC standard of 1.5 g/hp·hr.

(e) *Transient emission standards for spark-ignition engines.* The following criteria standards applied for spark-ignition engines based on transient measurement using the test procedures in 40 CFR part 86, subpart N. Starting in model year 1991, manufacturers could generate or use emission credits for NO_X and NO_X + NMHC standards. Table 2 follows:

TABLE 2 TO APPENDIX I—TRANSIENT EMISSION STANDARDS FOR SPARK-IGNITION ENGINES [a] [b]

Model year	Pollutant (g/hp·hr)			
	HC	CO	NO_X	NO_X + NMHC
1985–1987	1.1	14.4	10.6	
1988–1990	1.1	14.4	6.0	
1991–1997	1.1	14.4	5.0	
1998–2004 [c]	1.1	14.4	4.0	
2005–2007		14.4		[d] 1.0

[a] Standards applied only for gasoline-fueled engines through model year 1989. Standards started to apply for methanol in model year 1990, and for LPG and natural gas in model year 1998.

[b] Engines intended for installation only in heavy-duty vehicles above 14,000 pounds GVWR were subject to an HC standard of 1.9 g/hp·hr for model years 1987 through 2004, and a CO standard of 37.1 g/hp·hr for model years 1987 through 2007. In addition, for model years 1987 through 2007, up to 5 percent of a manufacturer's sales of engines intended for installation in heavy-duty vehicles at or below 14,000 pounds GVWR could be certified to the alternative HC and CO standards.

[c] For natural gas engines in model years 1998 through 2004, the NO_X standard was 5.0 g/hp·hr; the HC standards were 1.7 g/hp·hr for engines intended for installation only in vehicles above 14,000 pounds GVWR, and 0.9 g/hp·hr for other engines.

[d] Manufacturers could delay the 1.0 g/hp·hr NO_X + NMHC standard until model year 2008 by meeting an alternate NO_X + NMHC standard of 1.5 g/hp·hr applied for model years 2004 through 2007.

(f) *Transient emission standards for compression-ignition engines.* The following criteria standards applied for compression-ignition engines based on transient measurement using the test procedures in 40 CFR part 86, subpart N. Starting in model year 1991, manufacturers could generate or use emission credits for NO_X, NO_X + NMHC, and PM standards. Table 3 follows:

TABLE 3 TO APPENDIX I—TRANSIENT EMISSION STANDARDS FOR COMPRESSION-IGNITION ENGINES [a]

Model year	Pollutant (g/hp·hr)				
	HC	CO	NO_X	NO_X + NMHC	PM
1985–1987	1.3	15.5	10.7		
1988–1989	1.3	15.5	10.7		0.60
1990	1.3	15.5	6.0		0.60.
1991–1992	1.3	15.5	5.0		0.25
1993	1.3	15.5	5.0		0.25 truck, 0.10 bus.
1994–1995	1.3	15.5	5.0		0.10 truck, 0.07 urban bus.
1996–1997	1.3	15.5	5.0		0.10 truck, 0.05 urban bus.[b]
1998–2003	1.3	15.5	4.0		0.10 truck, 0.05 urban bus.[b]
2004–2006		15.5		[c] 2.4	0.10 truck, 0.05 urban bus.[b]

[a] Standards applied only for diesel-fueled engines through model year 1989. Standards started to apply for methanol in model year 1990, and for LPG and natural gas in model year 1997. An alternate HC standard of 1.2 g/hp·hr applied for natural gas engines for model years 1997 through 2003.

[b] The in-use PM standard for urban bus engines in model years 1996 through 2006 was 0.07 g/hp·hr.

[c] An optional NO_X + NMHC standard of 2.5 g/hp·hr applied in 2004 through 2006 in conjunction with a separate NMHC standard of 0.5 g/hp·hr.

■ 123. Add Appendix II to Part 1036 to read as follows:

Appendix II to Part 1036—Transient Duty Cycles

(a) This appendix specifies transient duty cycles for the engine and powertrain testing described in § 1036.510, as follows:

(1) The transient duty cycle for testing engines involves a schedule of normalized engine speed and torque values.

(2) The transient duty cycle for powertrain testing involves a schedule of vehicle speeds and road grade. Determine road grade at each point based on the peak rated power of the powertrain system, P_{rated}, determined in § 1036.527 and road grade coefficients using the following equation:

$$Road\ grade = a \cdot P^2_{rated} + b \cdot P_{rated} + c$$

(b) The following transient duty cycle applies for spark-ignition engines and powertrains:

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
1	0	0	0	0	0	0
2	0	0	0	20.0E–6	–18.7E–3	2.2E+0
3	0	0	0	30.0E–6	–28.1E–3	3.3E+0
4	0	0	0	30.0E–6	–28.1E–3	3.3E+0
5	0	0	0	30.0E–6	–28.1E–3	3.3E+0
6	0	0	0	30.0E–6	–28.1E–3	3.3E+0
7	0	0	0	30.0E–6	–28.1E–3	3.3E+0
8	0	0	0	30.0E–6	–28.1E–3	3.3E+0
9	0	0	0	30.0E–6	–28.1E–3	3.3E+0
10	0	0	0	30.0E–6	–28.1E–3	3.3E+0
11	0	0	0	30.0E–6	–28.1E–3	3.3E+0
12	0	0	0	30.0E–6	–28.1E–3	3.3E+0
13	0	0	0	30.0E–6	–28.1E–3	3.3E+0
14	0	0	0	30.0E–6	–28.1E–3	3.3E+0
15	0	0	0	30.0E–6	–28.1E–3	3.3E+0
16	0	0	0	30.0E–6	–28.1E–3	3.3E+0
17	0	0	0	30.0E–6	–28.1E–3	3.3E+0
18	0	0	0	30.0E–6	–28.1E–3	3.3E+0
19	0	0	0	30.0E–6	–28.1E–3	3.3E+0
20	0	0	0	30.0E–6	–28.1E–3	3.3E+0
21	0	0	0	30.0E–6	–28.1E–3	3.3E+0
22	0	0	0	30.0E–6	–28.1E–3	3.3E+0
23	0	0	0	30.0E–6	–28.1E–3	3.3E+0
24	0	0	0	30.0E–6	–28.1E–3	3.3E+0
25	7.00	44.40	0	30.0E–6	–28.1E–3	3.3E+0
26	16.00	85.40	3.04	30.0E–6	–28.1E–3	3.3E+0
27	27.00	97.80	5.59	30.0E–6	–28.1E–3	3.3E+0
28	38.00	100.00	8.37	30.0E–6	–28.1E–3	3.3E+0
29	45.00	100.00	11.06	30.0E–6	–28.1E–3	3.3E+0
30	51.00	100.00	13.63	30.0E–6	–28.1E–3	3.3E+0
31	54.00	97.50	15.87	30.0E–6	–28.1E–3	3.3E+0
32	53.00	90.00	18.09	30.0E–6	–28.1E–3	3.3E+0
33	49.00	75.20	20.66	10.0E–6	–9.4E–3	1.1E+0
34	45.00	50.00	22.26	–10.0E–6	9.4E–3	–1.1E+0
35	40.00	10.00	22.08	–30.0E–6	28.1E–3	–3.3E+0
36	34.00	2.30	20.58	–30.0E–6	28.1E–3	–3.3E+0
37	27.00	0	18.65	–30.0E–6	28.1E–3	–3.3E+0
38	21.00	2.30	16.50	–30.0E–6	28.1E–3	–3.3E+0
39	16.00	12.00	14.19	–30.0E–6	28.1E–3	–3.3E+0
40	12.00	35.30	11.65	–30.0E–6	28.1E–3	–3.3E+0
41	8.50	4.90	9.16	–30.0E–6	28.1E–3	–3.3E+0
42	5.00	([a])	8.01	–30.0E–6	28.1E–3	–3.3E+0
43	3.00	([a])	6.86	–30.0E–6	28.1E–3	–3.3E+0
44	0	0	3.19	–30.0E–6	28.1E–3	–3.3E+0
45	0	0	0	–30.0E–6	28.1E–3	–3.3E+0
46	0	0	0	–17.4E–6	16.2E–3	–2.1E+0
47	0	0	0	–4.8E–6	4.4E–3	–817.8E–3
48	0	0	0	7.8E–6	–7.5E–3	435.2E–3
49	0	0	0	7.8E–6	–7.5E–3	435.2E–3
50	0	0	0	7.8E–6	–7.5E–3	435.2E–3
51	3.00	10.00	1.05	7.8E–6	–7.5E–3	435.2E–3
52	11.00	40.20	2.13	7.8E–6	–7.5E–3	435.2E–3
53	20.00	53.00	3.26	7.8E–6	–7.5E–3	435.2E–3
54	27.50	64.80	4.31	7.8E–6	–7.5E–3	435.2E–3
55	32.00	78.00	5.35	7.8E–6	–7.5E–3	435.2E–3
56	32.00	78.00	6.38	7.8E–6	–7.5E–3	435.2E–3
57	27.50	56.00	7.42	7.8E–6	–7.5E–3	435.2E–3
58	26.00	24.40	8.45	7.8E–6	–7.5E–3	435.2E–3
59	24.00	([a])	9.43	7.8E–6	–7.5E–3	435.2E–3
60	23.00	([a])	10.18	7.8E–6	–7.5E–3	435.2E–3

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
61	24.00	([a])	10.71	7.8E–6	–7.5E–3	435.2E–3
62	27.00	([a])	11.10	7.8E–6	–7.5E–3	435.2E–3
63	34.00	([a])	11.62	7.8E–6	–7.5E–3	435.2E–3
64	44.00	28.00	12.44	7.8E–6	–7.5E–3	435.2E–3
65	57.00	74.40	13.55	7.8E–6	–7.5E–3	435.2E–3
66	60.00	74.40	14.69	7.8E–6	–7.5E–3	435.2E–3
67	53.00	33.60	15.42	7.8E–6	–7.5E–3	435.2E–3
68	48.00	([a])	16.06	7.8E–6	–7.5E–3	435.2E–3
69	44.00	([a])	16.64	9.2E–6	–8.9E–3	2.1E+0
70	40.00	([a])	17.36	10.7E–6	–10.4E–3	3.9E+0
71	40.00	7.00	17.86	12.2E–6	–11.9E–3	5.6E+0
72	44.00	22.70	18.05	12.2E–6	–11.9E–3	5.6E+0
73	46.00	30.00	18.09	12.2E–6	–11.9E–3	5.6E+0
74	46.00	32.00	18.19	12.2E–6	–11.9E–3	5.6E+0
75	44.00	25.00	18.55	12.2E–6	–11.9E–3	5.6E+0
76	40.00	18.00	19.04	12.2E–6	–11.9E–3	5.6E+0
77	37.00	14.00	19.58	12.2E–6	–11.9E–3	5.6E+0
78	36.00	10.00	19.90	12.2E–6	–11.9E–3	5.6E+0
79	34.00	0	19.99	12.2E–6	–11.9E–3	5.6E+0
80	34.00	([a])	19.85	12.2E–6	–11.9E–3	5.6E+0
81	32.00	([a])	19.73	12.2E–6	–11.9E–3	5.6E+0
82	31.00	([a])	19.70	12.2E–6	–11.9E–3	5.6E+0
83	36.00	39.90	19.84	12.2E–6	–11.9E–3	5.6E+0
84	42.00	84.70	20.10	12.2E–6	–11.9E–3	5.6E+0
85	48.00	90.00	20.44	12.2E–6	–11.9E–3	5.6E+0
86	50.00	90.00	20.98	12.2E–6	–11.9E–3	5.6E+0
87	50.00	90.00	21.52	12.2E–6	–11.9E–3	5.6E+0
88	47.00	85.00	22.06	12.2E–6	–11.9E–3	5.6E+0
89	43.00	75.00	22.24	12.2E–6	–11.9E–3	5.6E+0
90	38.00	60.00	22.35	4.1E–6	–4.0E–3	1.9E+0
91	36.00	36.00	22.37	–4.1E–6	4.0E–3	–1.9E+0
92	36.00	7.50	22.35	–12.2E–6	11.9E–3	–5.6E+0
93	36.30	([a])	22.27	–12.2E–6	11.9E–3	–5.6E+0
94	45.00	64.50	22.05	–12.2E–6	11.9E–3	–5.6E+0
95	53.00	67.00	21.79	–12.2E–6	11.9E–3	–5.6E+0
96	58.00	64.50	21.50	–12.2E–6	11.9E–3	–5.6E+0
97	62.00	60.30	21.20	–12.2E–6	11.9E–3	–5.6E+0
98	63.00	55.50	20.90	–12.2E–6	11.9E–3	–5.6E+0
99	62.00	52.30	20.59	–12.2E–6	11.9E–3	–5.6E+0
100	61.00	47.00	20.42	–12.2E–6	11.9E–3	–5.6E+0
101	55.00	44.00	20.25	–12.2E–6	11.9E–3	–5.6E+0
102	50.00	39.00	20.07	–12.2E–6	11.9E–3	–5.6E+0
103	45.00	36.00	19.75	–12.2E–6	11.9E–3	–5.6E+0
104	40.00	34.00	19.38	–12.2E–6	11.9E–3	–5.6E+0
105	36.00	30.00	19.00	–12.2E–6	11.9E–3	–5.6E+0
106	34.00	25.80	18.61	–12.2E–6	11.9E–3	–5.6E+0
107	32.00	20.00	18.20	–12.2E–6	11.9E–3	–5.6E+0
108	30.00	14.60	17.75	–12.2E–6	11.9E–3	–5.6E+0
109	26.00	10.00	17.27	–12.2E–6	11.9E–3	–5.6E+0
110	23.00	0	16.75	–12.2E–6	11.9E–3	–5.6E+0
111	18.00	([a])	16.20	–12.2E–6	11.9E–3	–5.6E+0
112	16.00	([a])	15.66	–12.2E–6	11.9E–3	–5.6E+0
113	18.00	([a])	15.15	–12.2E–6	11.9E–3	–5.6E+0
114	20.00	27.60	14.65	–12.2E–6	11.9E–3	–5.6E+0
115	17.00	4.00	14.16	–12.2E–6	11.9E–3	–5.6E+0
116	14.00	([a])	13.67	–12.2E–6	11.9E–3	–5.6E+0
117	12.00	([a])	12.59	–12.2E–6	11.9E–3	–5.6E+0
118	9.00	([a])	10.93	–12.2E–6	11.9E–3	–5.6E+0
119	7.00	([a])	9.28	–12.2E–6	11.9E–3	–5.6E+0
120	7.00	([a])	7.62	–12.2E–6	11.9E–3	–5.6E+0
121	5.00	([a])	5.96	–12.2E–6	11.9E–3	–5.6E+0
122	4.00	([a])	4.30	–12.2E–6	11.9E–3	–5.6E+0
123	3.00	([a])	2.64	–12.2E–6	11.9E–3	–5.6E+0
124	2.00	([a])	0.99	–12.2E–6	11.9E–3	–5.6E+0
125	0	0	0.19	–12.2E–6	11.9E–3	–5.6E+0
126	0	0	0	–12.2E–6	11.9E–3	–5.6E+0
127	0	0	0	–8.1E–6	7.9E–3	–3.7E+0
128	0	0	0	–4.1E–6	4.0E–3	–1.9E+0
129	0	0	0	0	0	0
130	5.00	8.00	3.25	0	0	0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
131	8.00	16.30	5.47	0	0	0
132	10.00	27.50	6.71	0	0	0
133	8.00	27.50	6.71	0	0	0
134	5.00	9.00	6.71	0	0	0
135	2.00	1.80	6.55	0	0	0
136	0	0	6.01	0	0	0
137	0	0	5.15	0	0	0
138	0	0	3.90	0	0	0
139	0	0	2.19	0	0	0
140	0	0	0	9.0E–6	–8.4E–3	2.0E+0
141	0	0	0	17.9E–6	–16.8E–3	3.9E+0
142	0	0	0	26.9E–6	–25.2E–3	5.9E+0
143	0	0	0	26.9E–6	–25.2E–3	5.9E+0
144	0	0	0	26.9E–6	–25.2E–3	5.9E+0
145	0	0	0	26.9E–6	–25.2E–3	5.9E+0
146	0	0	0	26.9E–6	–25.2E–3	5.9E+0
147	0	0	0	26.9E–6	–25.2E–3	5.9E+0
148	0	0	0	26.9E–6	–25.2E–3	5.9E+0
149	2.00	4.80	0	26.9E–6	–25.2E–3	5.9E+0
150	1.00	4.50	0	26.9E–6	–25.2E–3	5.9E+0
151	0	0	0	26.9E–6	–25.2E–3	5.9E+0
152	0	0	0	26.9E–6	–25.2E–3	5.9E+0
153	0	0	0	26.9E–6	–25.2E–3	5.9E+0
154	0	0	0	26.9E–6	–25.2E–3	5.9E+0
155	0	0	0	26.9E–6	–25.2E–3	5.9E+0
156	0	0	0	26.9E–6	–25.2E–3	5.9E+0
157	0	0	0	26.9E–6	–25.2E–3	5.9E+0
158	0	0	0	26.9E–6	–25.2E–3	5.9E+0
159	0	0	0	26.9E–6	–25.2E–3	5.9E+0
160	0	0	0	26.9E–6	–25.2E–3	5.9E+0
161	0	0	0	26.9E–6	–25.2E–3	5.9E+0
162	0	0	0	26.9E–6	–25.2E–3	5.9E+0
163	0	0	0	26.9E–6	–25.2E–3	5.9E+0
164	0	0	0	26.9E–6	–25.2E–3	5.9E+0
165	0	0	0	26.9E–6	–25.2E–3	5.9E+0
166	0	0	0	26.9E–6	–25.2E–3	5.9E+0
167	8.00	27.00	1.95	26.9E–6	–25.2E–3	5.9E+0
168	18.00	65.00	3.70	26.9E–6	–25.2E–3	5.9E+0
169	23.00	82.50	5.53	26.9E–6	–25.2E–3	5.9E+0
170	23.00	88.00	7.22	26.9E–6	–25.2E–3	5.9E+0
171	21.00	88.00	8.64	26.9E–6	–25.2E–3	5.9E+0
172	18.00	81.30	10.33	9.0E–6	–8.4E–3	2.0E+0
173	17.00	32.00	11.18	–9.0E–6	8.4E–3	–2.0E+0
174	15.00	([a])	10.57	–26.9E–6	25.2E–3	–5.9E+0
175	13.00	([a])	9.33	–26.9E–6	25.2E–3	–5.9E+0
176	11.00	([a])	7.87	–26.9E–6	25.2E–3	–5.9E+0
177	8.00	([a])	6.27	–26.9E–6	25.2E–3	–5.9E+0
178	6.00	([a])	4.58	–26.9E–6	25.2E–3	–5.9E+0
179	4.00	([a])	3.81	–26.9E–6	25.2E–3	–5.9E+0
180	2.00	([a])	2.35	–26.9E–6	25.2E–3	–5.9E+0
181	0	0	0	–26.9E–6	25.2E–3	–5.9E+0
182	0	0	0	–17.9E–6	16.8E–3	–3.9E+0
183	0	0	0	–9.0E–6	8.4E–3	–2.0E+0
184	0	0	0	0	0	0
185	0	0	0	0	0	0
186	0	0	0	0	0	0
187	0	0	0	0	0	0
188	0	0	0	0	0	0
189	0	0	0	0	0	0
190	0	0	0	0	0	0
191	0	0	0	0	0	0
192	0	0	0	0	0	0
193	0	0	0	0	0	0
194	0	0	0	0	0	0
195	0	0	0	0	0	0
196	0	0	0	0	0	0
197	0	0	0	0	0	0
198	0	0	0	0	0	0
199	0	0	0	0	0	0
200	0	0	0	0	0	0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
201	0	0	0	0	0	0
202	0	0	0	0	0	0
203	0	0	0	0	0	0
204	0	4.00	0	0	0	0
205	0.50	7.70	1.60	0	0	0
206	5.00	14.00	4.24	0	0	0
207	11.00	24.70	7.50	0	0	0
208	15.00	42.30	9.18	0	0	0
209	16.00	70.00	10.11	0	0	0
210	17.00	70.00	10.34	0	0	0
211	17.00	50.00	10.46	0	0	0
212	16.00	26.30	9.93	0	0	0
213	14.00	5.00	8.70	0	0	0
214	10.00	([a])	7.43	0	0	0
215	10.00	([a])	9.14	0	0	0
216	14.00	73.30	9.72	0	0	0
217	18.00	83.00	9.84	0	0	0
218	19.00	84.80	10.02	0	0	0
219	18.00	84.80	9.92	0	0	0
220	16.00	82.80	9.14	0	0	0
221	11.00	74.00	8.23	0	0	0
222	7.00	8.50	6.64	0	0	0
223	4.00	0	4.51	0	0	0
224	0	0	0	0	0	0
225	0	0	0	3.6E–6	–3.8E–3	362.5E–3
226	0	0	0	7.2E–6	–7.6E–3	725.0E–3
227	0	0	0	10.7E–6	–11.3E–3	1.1E+0
228	0	0	0	10.7E–6	–11.3E–3	1.1E+0
229	0	0	0	10.7E–6	–11.3E–3	1.1E+0
230	0	0	0	10.7E–6	–11.3E–3	1.1E+0
231	0	0	0	10.7E–6	–11.3E–3	1.1E+0
232	0	0	0	10.7E–6	–11.3E–3	1.1E+0
233	6.00	17.60	0	10.7E–6	–11.3E–3	1.1E+0
234	6.00	19.60	0	10.7E–6	–11.3E–3	1.1E+0
235	5.00	14.00	0	10.7E–6	–11.3E–3	1.1E+0
236	3.00	9.80	0	10.7E–6	–11.3E–3	1.1E+0
237	1.00	5.50	0	10.7E–6	–11.3E–3	1.1E+0
238	0	3.00	0	10.7E–6	–11.3E–3	1.1E+0
239	0	0	0	10.7E–6	–11.3E–3	1.1E+0
240	0	0	0	10.7E–6	–11.3E–3	1.1E+0
241	0	0	0	10.7E–6	–11.3E–3	1.1E+0
242	0	0	0	10.7E–6	–11.3E–3	1.1E+0
243	0	0	0	10.7E–6	–11.3E–3	1.1E+0
244	0	0	0	10.7E–6	–11.3E–3	1.1E+0
245	0	0	0	10.7E–6	–11.3E–3	1.1E+0
246	0	0	0	10.7E–6	–11.3E–3	1.1E+0
247	0	0	0	10.7E–6	–11.3E–3	1.1E+0
248	0	0	0	10.7E–6	–11.3E–3	1.1E+0
249	0	0	0	10.7E–6	–11.3E–3	1.1E+0
250	0	0	0	10.7E–6	–11.3E–3	1.1E+0
251	0	0	0	10.7E–6	–11.3E–3	1.1E+0
252	0	0	0	10.7E–6	–11.3E–3	1.1E+0
253	0	0	0	10.7E–6	–11.3E–3	1.1E+0
254	0	0	0	10.7E–6	–11.3E–3	1.1E+0
255	0	0	0	10.7E–6	–11.3E–3	1.1E+0
256	0	0	0	10.7E–6	–11.3E–3	1.1E+0
257	0	0	0	10.7E–6	–11.3E–3	1.1E+0
258	0	0	0	10.7E–6	–11.3E–3	1.1E+0
259	0	0	0	10.7E–6	–11.3E–3	1.1E+0
260	0	0	0	10.7E–6	–11.3E–3	1.1E+0
261	0	0	0	10.7E–6	–11.3E–3	1.1E+0
262	0	0	0	10.7E–6	–11.3E–3	1.1E+0
263	0	0	0	10.7E–6	–11.3E–3	1.1E+0
264	0	0	0	10.7E–6	–11.3E–3	1.1E+0
265	0	0	0	10.7E–6	–11.3E–3	1.1E+0
266	0	0	0	10.7E–6	–11.3E–3	1.1E+0
267	0	0	0	10.7E–6	–11.3E–3	1.1E+0
268	0	0	0	10.7E–6	–11.3E–3	1.1E+0
269	0	0	0	10.7E–6	–11.3E–3	1.1E+0
270	0	0	0	10.7E–6	–11.3E–3	1.1E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
271	0	0	0	10.7E–6	–11.3E–3	1.1E+0
272	0	0	0	10.7E–6	–11.3E–3	1.1E+0
273	0	0	0	10.7E–6	–11.3E–3	1.1E+0
274	0	0	0	10.7E–6	–11.3E–3	1.1E+0
275	0	0	0	10.7E–6	–11.3E–3	1.1E+0
276	0	0	0	10.7E–6	–11.3E–3	1.1E+0
277	0	0	0	10.7E–6	–11.3E–3	1.1E+0
278	0	0	0	10.7E–6	–11.3E–3	1.1E+0
279	0	0	0	10.7E–6	–11.3E–3	1.1E+0
280	0	0	0	10.7E–6	–11.3E–3	1.1E+0
281	0	7.00	0	10.7E–6	–11.3E–3	1.1E+0
282	1.00	10.00	0	10.7E–6	–11.3E–3	1.1E+0
283	2.00	11.50	0	10.7E–6	–11.3E–3	1.1E+0
284	1.00	10.00	0	10.7E–6	–11.3E–3	1.1E+0
285	0	0	0	10.7E–6	–11.3E–3	1.1E+0
286	0	0	0	10.7E–6	–11.3E–3	1.1E+0
287	0	0	0	10.7E–6	–11.3E–3	1.1E+0
288	0	0	0	10.7E–6	–11.3E–3	1.1E+0
289	0	0	0	10.7E–6	–11.3E–3	1.1E+0
290	0	0	0	10.7E–6	–11.3E–3	1.1E+0
291	0	0	0	10.7E–6	–11.3E–3	1.1E+0
292	0	0	0	10.7E–6	–11.3E–3	1.1E+0
293	0	0	0	10.7E–6	–11.3E–3	1.1E+0
294	0	0	0	10.7E–6	–11.3E–3	1.1E+0
295	0	0	0	10.7E–6	–11.3E–3	1.1E+0
296	0	0	0	10.7E–6	–11.3E–3	1.1E+0
297	0	0	0	10.7E–6	–11.3E–3	1.1E+0
298	0	0	0	10.7E–6	–11.3E–3	1.1E+0
299	0	28.00	0	10.7E–6	–11.3E–3	1.1E+0
300	0	30.00	0	10.7E–6	–11.3E–3	1.1E+0
301	2.00	32.00	0.55	10.7E–6	–11.3E–3	1.1E+0
302	6.00	34.00	1.92	10.7E–6	–11.3E–3	1.1E+0
303	14.00	36.00	3.18	10.7E–6	–11.3E–3	1.1E+0
304	19.00	36.00	4.80	10.7E–6	–11.3E–3	1.1E+0
305	24.50	36.00	6.63	10.7E–6	–11.3E–3	1.1E+0
306	24.50	36.00	7.87	10.7E–6	–11.3E–3	1.1E+0
307	24.00	30.00	8.32	10.7E–6	–11.3E–3	1.1E+0
308	19.00	24.00	9.66	10.7E–6	–11.3E–3	1.1E+0
309	13.00	18.00	11.46	10.7E–6	–11.3E–3	1.1E+0
310	9.00	14.00	13.28	10.7E–6	–11.3E–3	1.1E+0
311	7.00	8.00	14.61	10.7E–6	–11.3E–3	1.1E+0
312	6.00	0	14.39	10.7E–6	–11.3E–3	1.1E+0
313	4.00	3.00	13.50	10.7E–6	–11.3E–3	1.1E+0
314	3.00	6.80	12.41	10.7E–6	–11.3E–3	1.1E+0
315	0	0	11.30	10.7E–6	–11.3E–3	1.1E+0
316	0	0	11.25	10.7E–6	–11.3E–3	1.1E+0
317	0	0	12.29	10.7E–6	–11.3E–3	1.1E+0
318	0	0	13.26	10.7E–6	–11.3E–3	1.1E+0
319	0	0	13.66	10.7E–6	–11.3E–3	1.1E+0
320	0	0	14.27	10.7E–6	–11.3E–3	1.1E+0
321	0	0	15.17	10.7E–6	–11.3E–3	1.1E+0
322	0	0	16.05	10.7E–6	–11.3E–3	1.1E+0
323	0	18.00	16.49	10.7E–6	–11.3E–3	1.1E+0
324	3.00	40.00	17.52	10.7E–6	–11.3E–3	1.1E+0
325	8.00	86.00	18.06	10.7E–6	–11.3E–3	1.1E+0
326	18.00	97.00	18.18	10.7E–6	–11.3E–3	1.1E+0
327	38.00	100.00	18.95	10.7E–6	–11.3E–3	1.1E+0
328	45.50	100.00	20.48	3.6E–6	–3.8E–3	362.5E–3
329	45.00	96.00	20.48	–3.6E–6	3.8E–3	–362.5E–3
330	44.00	84.40	19.50	–10.7E–6	11.3E–3	–1.1E+0
331	43.00	53.60	18.43	–10.7E–6	11.3E–3	–1.1E+0
332	41.00	5.00	17.44	–10.7E–6	11.3E–3	–1.1E+0
333	43.00	47.60	16.77	–10.7E–6	11.3E–3	–1.1E+0
334	44.00	90.00	16.36	–10.7E–6	11.3E–3	–1.1E+0
335	45.00	90.00	16.34	–10.7E–6	11.3E–3	–1.1E+0
336	44.00	73.00	16.79	–10.7E–6	11.3E–3	–1.1E+0
337	40.00	54.00	16.34	–10.7E–6	11.3E–3	–1.1E+0
338	38.00	34.70	15.13	–10.7E–6	11.3E–3	–1.1E+0
339	36.00	10.00	13.72	–10.7E–6	11.3E–3	–1.1E+0
340	35.00	10.00	12.04	–10.7E–6	11.3E–3	–1.1E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
341	35.00	10.00	10.44	–10.7E–6	11.3E–3	–1.1E+0
342	35.50	60.00	9.71	–10.7E–6	11.3E–3	–1.1E+0
343	36.00	57.90	9.81	–10.7E–6	11.3E–3	–1.1E+0
344	37.00	53.00	10.65	–10.7E–6	11.3E–3	–1.1E+0
345	39.00	50.00	11.42	–10.7E–6	11.3E–3	–1.1E+0
346	40.50	50.00	10.54	–10.7E–6	11.3E–3	–1.1E+0
347	43.00	50.00	8.87	–3.6E–6	3.8E–3	–362.5E–3
348	45.00	50.00	9.26	3.6E–6	–3.8E–3	362.5E–3
349	48.00	50.00	10.33	10.7E–6	–11.3E–3	1.1E+0
350	51.00	52.00	10.79	10.7E–6	–11.3E–3	1.1E+0
351	56.00	58.70	11.80	10.7E–6	–11.3E–3	1.1E+0
352	64.00	70.00	14.06	10.7E–6	–11.3E–3	1.1E+0
353	68.00	70.00	16.77	10.7E–6	–11.3E–3	1.1E+0
354	70.00	70.00	18.83	10.7E–6	–11.3E–3	1.1E+0
355	65.50	64.60	22.12	10.7E–6	–11.3E–3	1.1E+0
356	61.00	28.90	24.10	10.7E–6	–11.3E–3	1.1E+0
357	55.00	([a])	25.97	10.7E–6	–11.3E–3	1.1E+0
358	50.00	([a])	27.04	10.7E–6	–11.3E–3	1.1E+0
359	45.00	([a])	27.18	10.7E–6	–11.3E–3	1.1E+0
360	38.00	([a])	28.34	10.7E–6	–11.3E–3	1.1E+0
361	28.00	([a])	29.69	10.7E–6	–11.3E–3	1.1E+0
362	19.00	([a])	29.86	10.7E–6	–11.3E–3	1.1E+0
363	14.00	([a])	29.51	10.7E–6	–11.3E–3	1.1E+0
364	7.00	([a])	29.91	10.7E–6	–11.3E–3	1.1E+0
365	2.00	([a])	30.99	10.7E–6	–11.3E–3	1.1E+0
366	3.00	5.00	32.55	10.7E–6	–11.3E–3	1.1E+0
367	7.00	25.00	33.43	3.6E–6	–3.8E–3	362.5E–3
368	9.00	38.00	33.56	–3.6E–6	3.8E–3	–362.5E–3
369	7.00	17.00	33.36	–10.7E–6	11.3E–3	–1.1E+0
370	4.00	2.00	32.65	–10.7E–6	11.3E–3	–1.1E+0
371	3.00	([a])	31.80	–10.7E–6	11.3E–3	–1.1E+0
372	3.00	([a])	30.92	–10.7E–6	11.3E–3	–1.1E+0
373	11.00	70.00	30.42	–10.7E–6	11.3E–3	–1.1E+0
374	15.00	97.60	29.73	–10.7E–6	11.3E–3	–1.1E+0
375	16.00	100.00	28.65	–10.7E–6	11.3E–3	–1.1E+0
376	19.00	100.00	27.50	–10.7E–6	11.3E–3	–1.1E+0
377	26.00	100.00	26.22	–10.7E–6	11.3E–3	–1.1E+0
378	29.00	95.00	24.69	–10.7E–6	11.3E–3	–1.1E+0
379	25.00	63.00	23.13	–10.7E–6	11.3E–3	–1.1E+0
380	19.00	([a])	21.68	–10.7E–6	11.3E–3	–1.1E+0
381	12.00	([a])	20.25	–10.7E–6	11.3E–3	–1.1E+0
382	8.00	([a])	15.73	–10.7E–6	11.3E–3	–1.1E+0
383	5.00	([a])	10.93	–10.7E–6	11.3E–3	–1.1E+0
384	2.00	([a])	6.12	–10.7E–6	11.3E–3	–1.1E+0
385	1.00	([a])	1.31	–10.7E–6	11.3E–3	–1.1E+0
386	0	0	0	–10.7E–6	11.3E–3	–1.1E+0
387	0	0	0	–10.7E–6	11.3E–3	–1.1E+0
388	0	0	0	–10.7E–6	11.3E–3	–1.1E+0
389	0	0	0	–10.7E–6	11.3E–3	–1.1E+0
390	0	0	0	–10.7E–6	11.3E–3	–1.1E+0
391	0	0	0	–10.7E–6	11.3E–3	–1.1E+0
392	0	0	0	–1.5E–6	2.0E–3	1.3E+0
393	0	0	0	7.7E–6	–7.3E–3	3.8E+0
394	0	0	0	16.9E–6	–16.6E–3	6.2E+0
395	0	0	0	16.9E–6	–16.6E–3	6.2E+0
396	0	0	0	16.9E–6	–16.6E–3	6.2E+0
397	0	0	0	16.9E–6	–16.6E–3	6.2E+0
398	0	0	0	16.9E–6	–16.6E–3	6.2E+0
399	0	0	0	16.9E–6	–16.6E–3	6.2E+0
400	0	0	0	16.9E–6	–16.6E–3	6.2E+0
401	0	0	0	16.9E–6	–16.6E–3	6.2E+0
402	0	0	0	16.9E–6	–16.6E–3	6.2E+0
403	0	0	0	16.9E–6	–16.6E–3	6.2E+0
404	0	0	0	16.9E–6	–16.6E–3	6.2E+0
405	0	0	0	16.9E–6	–16.6E–3	6.2E+0
406	0	0	0	16.9E–6	–16.6E–3	6.2E+0
407	0	0	0	16.9E–6	–16.6E–3	6.2E+0
408	0	0	0	16.9E–6	–16.6E–3	6.2E+0
409	0	0	0	16.9E–6	–16.6E–3	6.2E+0
410	0	0	0	16.9E–6	–16.6E–3	6.2E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
411	0	0	0	16.9E–6	–16.6E–3	6.2E+0
412	0	0	0	16.9E–6	–16.6E–3	6.2E+0
413	0	0	0	16.9E–6	–16.6E–3	6.2E+0
414	0	0	0	16.9E–6	–16.6E–3	6.2E+0
415	0	0	0	16.9E–6	–16.6E–3	6.2E+0
416	0	0	0	16.9E–6	–16.6E–3	6.2E+0
417	0	0	0	16.9E–6	–16.6E–3	6.2E+0
418	0	0	0	16.9E–6	–16.6E–3	6.2E+0
419	4.00	20.00	0	16.9E–6	–16.6E–3	6.2E+0
420	4.00	20.00	0	16.9E–6	–16.6E–3	6.2E+0
421	0	0	0	16.9E–6	–16.6E–3	6.2E+0
422	0	0	0	16.9E–6	–16.6E–3	6.2E+0
423	0	0	0	16.9E–6	–16.6E–3	6.2E+0
424	0	0	0	16.9E–6	–16.6E–3	6.2E+0
425	0	0	0	16.9E–6	–16.6E–3	6.2E+0
426	0	0	0	16.9E–6	–16.6E–3	6.2E+0
427	0	0	0	16.9E–6	–16.6E–3	6.2E+0
428	0	0	0	16.9E–6	–16.6E–3	6.2E+0
429	0	0	0	16.9E–6	–16.6E–3	6.2E+0
430	2.00	0	1.18	16.9E–6	–16.6E–3	6.2E+0
431	6.00	2.00	2.85	16.9E–6	–16.6E–3	6.2E+0
432	14.00	28.80	4.57	16.9E–6	–16.6E–3	6.2E+0
433	20.00	30.00	7.42	16.9E–6	–16.6E–3	6.2E+0
434	24.40	11.00	10.79	16.9E–6	–16.6E–3	6.2E+0
435	24.00	10.00	13.51	16.9E–6	–16.6E–3	6.2E+0
436	24.00	12.00	15.48	16.9E–6	–16.6E–3	6.2E+0
437	28.00	52.00	16.82	16.9E–6	–16.6E–3	6.2E+0
438	32.00	52.00	17.86	16.9E–6	–16.6E–3	6.2E+0
439	34.00	46.00	18.70	16.9E–6	–16.6E–3	6.2E+0
440	34.00	30.00	19.11	16.9E–6	–16.6E–3	6.2E+0
441	34.50	30.00	19.28	16.9E–6	–16.6E–3	6.2E+0
442	35.00	30.00	19.38	16.9E–6	–16.6E–3	6.2E+0
443	36.00	35.00	19.53	16.9E–6	–16.6E–3	6.2E+0
444	39.00	40.00	19.57	16.9E–6	–16.6E–3	6.2E+0
445	45.00	50.00	19.09	16.9E–6	–16.6E–3	6.2E+0
446	49.00	56.00	18.20	16.9E–6	–16.6E–3	6.2E+0
447	50.00	([a])	17.14	16.9E–6	–16.6E–3	6.2E+0
448	45.00	([a])	15.90	16.9E–6	–16.6E–3	6.2E+0
449	39.00	([a])	14.42	16.9E–6	–16.6E–3	6.2E+0
450	34.00	([a])	13.86	16.9E–6	–16.6E–3	6.2E+0
451	28.00	([a])	15.45	16.9E–6	–16.6E–3	6.2E+0
452	25.00	([a])	17.32	16.9E–6	–16.6E–3	6.2E+0
453	21.00	([a])	18.03	16.9E–6	–16.6E–3	6.2E+0
454	18.00	([a])	18.19	16.9E–6	–16.6E–3	6.2E+0
455	15.00	([a])	18.30	16.9E–6	–16.6E–3	6.2E+0
456	12.00	([a])	18.40	16.9E–6	–16.6E–3	6.2E+0
457	18.00	([a])	18.33	16.9E–6	–16.6E–3	6.2E+0
458	29.00	19.80	18.68	5.6E–6	–5.5E–3	2.1E+0
459	40.00	54.00	19.10	–5.6E–6	5.5E–3	–2.1E+0
460	52.00	82.00	18.69	–16.9E–6	16.6E–3	–6.2E+0
461	64.00	95.00	17.89	–16.9E–6	16.6E–3	–6.2E+0
462	71.00	99.00	17.23	–16.9E–6	16.6E–3	–6.2E+0
463	77.00	100.00	16.65	–16.9E–6	16.6E–3	–6.2E+0
464	84.00	100.00	15.76	–16.9E–6	16.6E–3	–6.2E+0
465	85.00	99.00	14.53	–16.9E–6	16.6E–3	–6.2E+0
466	85.00	95.00	13.07	–16.9E–6	16.6E–3	–6.2E+0
467	84.00	90.00	11.26	–16.9E–6	16.6E–3	–6.2E+0
468	82.00	84.60	9.32	–16.9E–6	16.6E–3	–6.2E+0
469	80.00	78.50	8.04	–7.7E–6	7.5E–3	–2.7E+0
470	78.00	78.50	8.15	1.5E–6	–1.5E–3	724.3E–3
471	77.00	70.00	9.43	10.7E–6	–10.5E–3	4.2E+0
472	76.00	65.50	10.80	10.7E–6	–10.5E–3	4.2E+0
473	74.00	61.50	12.16	10.7E–6	–10.5E–3	4.2E+0
474	72.00	56.00	14.25	10.7E–6	–10.5E–3	4.2E+0
475	70.00	52.00	16.38	10.7E–6	–10.5E–3	4.2E+0
476	68.00	46.00	17.48	10.7E–6	–10.5E–3	4.2E+0
477	66.50	40.00	17.41	10.7E–6	–10.5E–3	4.2E+0
478	65.00	32.00	16.78	10.7E–6	–10.5E–3	4.2E+0
479	63.00	26.00	16.06	10.7E–6	–10.5E–3	4.2E+0
480	61.00	25.60	15.24	10.7E–6	–10.5E–3	4.2E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
481	61.00	72.00	14.69	10.7E–6	–10.5E–3	4.2E+0
482	61.00	78.00	15.38	10.7E–6	–10.5E–3	4.2E+0
483	58.00	72.00	16.86	10.7E–6	–10.5E–3	4.2E+0
484	50.00	64.00	17.35	10.7E–6	–10.5E–3	4.2E+0
485	44.00	55.00	16.98	10.7E–6	–10.5E–3	4.2E+0
486	35.00	40.00	16.57	10.7E–6	–10.5E–3	4.2E+0
487	26.00	20.00	16.12	10.7E–6	–10.5E–3	4.2E+0
488	21.00	([a])	15.67	10.7E–6	–10.5E–3	4.2E+0
489	18.00	([a])	15.46	10.7E–6	–10.5E–3	4.2E+0
490	16.00	([a])	15.52	10.7E–6	–10.5E–3	4.2E+0
491	19.00	([a])	15.89	10.7E–6	–10.5E–3	4.2E+0
492	24.00	2.00	16.77	10.7E–6	–10.5E–3	4.2E+0
493	32.00	68.50	18.08	10.7E–6	–10.5E–3	4.2E+0
494	45.00	78.00	19.31	10.7E–6	–10.5E–3	4.2E+0
495	51.00	86.00	20.11	10.7E–6	–10.5E–3	4.2E+0
496	58.00	92.00	20.75	10.7E–6	–10.5E–3	4.2E+0
497	64.00	97.00	21.23	10.7E–6	–10.5E–3	4.2E+0
498	71.00	100.00	21.40	10.7E–6	–10.5E–3	4.2E+0
499	73.00	98.00	21.51	10.7E–6	–10.5E–3	4.2E+0
500	73.00	94.00	22.18	10.7E–6	–10.5E–3	4.2E+0
501	73.00	86.00	22.48	10.7E–6	–10.5E–3	4.2E+0
502	73.00	82.00	22.49	10.7E–6	–10.5E–3	4.2E+0
503	76.00	84.00	23.27	10.7E–6	–10.5E–3	4.2E+0
504	80.00	98.00	24.39	10.7E–6	–10.5E–3	4.2E+0
505	84.00	100.00	25.09	10.7E–6	–10.5E–3	4.2E+0
506	85.00	100.00	25.26	10.7E–6	–10.5E–3	4.2E+0
507	84.00	100.00	25.15	10.7E–6	–10.5E–3	4.2E+0
508	81.00	92.00	24.80	10.7E–6	–10.5E–3	4.2E+0
509	75.00	80.00	24.30	10.7E–6	–10.5E–3	4.2E+0
510	73.00	70.00	23.92	10.7E–6	–10.5E–3	4.2E+0
511	70.00	60.00	23.82	10.7E–6	–10.5E–3	4.2E+0
512	67.00	53.00	23.75	10.7E–6	–10.5E–3	4.2E+0
513	65.00	45.00	24.34	10.7E–6	–10.5E–3	4.2E+0
514	63.00	36.50	25.03	10.7E–6	–10.5E–3	4.2E+0
515	62.00	28.00	25.13	10.7E–6	–10.5E–3	4.2E+0
516	61.00	22.50	25.14	10.7E–6	–10.5E–3	4.2E+0
517	60.00	23.00	25.14	10.7E–6	–10.5E–3	4.2E+0
518	60.00	24.00	25.15	10.7E–6	–10.5E–3	4.2E+0
519	60.00	24.00	25.15	10.7E–6	–10.5E–3	4.2E+0
520	60.00	26.00	25.16	10.7E–6	–10.5E–3	4.2E+0
521	61.00	60.00	25.17	10.7E–6	–10.5E–3	4.2E+0
522	62.00	64.00	25.24	10.7E–6	–10.5E–3	4.2E+0
523	63.00	64.00	25.41	10.7E–6	–10.5E–3	4.2E+0
524	64.00	64.00	26.56	10.7E–6	–10.5E–3	4.2E+0
525	62.00	64.00	28.84	10.7E–6	–10.5E–3	4.2E+0
526	56.00	60.00	31.08	10.7E–6	–10.5E–3	4.2E+0
527	53.00	([a])	32.37	10.7E–6	–10.5E–3	4.2E+0
528	49.00	([a])	32.70	10.7E–6	–10.5E–3	4.2E+0
529	47.00	([a])	32.76	6.4E–6	–6.7E–3	2.3E+0
530	46.00	([a])	32.82	2.1E–6	–2.9E–3	327.5E–3
531	45.00	([a])	32.88	–2.2E–6	973.4E–6	–1.6E+0
532	45.00	30.00	33.19	–2.2E–6	973.4E–6	–1.6E+0
533	46.00	50.00	33.89	–2.2E–6	973.4E–6	–1.6E+0
534	46.00	50.00	35.07	–2.2E–6	973.4E–6	–1.6E+0
535	47.00	50.00	36.61	–2.2E–6	973.4E–6	–1.6E+0
536	47.00	50.00	37.63	–2.2E–6	973.4E–6	–1.6E+0
537	47.00	30.00	38.05	–2.2E–6	973.4E–6	–1.6E+0
538	46.00	12.00	38.67	–2.2E–6	973.4E–6	–1.6E+0
539	45.00	10.50	39.32	–2.2E–6	973.4E–6	–1.6E+0
540	44.00	10.00	39.54	–2.2E–6	973.4E–6	–1.6E+0
541	41.00	10.00	39.55	–2.2E–6	973.4E–6	–1.6E+0
542	37.00	9.00	39.56	–2.2E–6	973.4E–6	–1.6E+0
543	36.00	2.00	39.58	–2.2E–6	973.4E–6	–1.6E+0
544	35.00	([a])	39.59	–2.2E–6	973.4E–6	–1.6E+0
545	38.00	67.00	39.61	–2.2E–6	973.4E–6	–1.6E+0
546	35.00	([a])	39.60	–2.2E–6	973.4E–6	–1.6E+0
547	31.00	15.00	39.69	–2.2E–6	973.4E–6	–1.6E+0
548	28.00	55.00	39.99	–2.2E–6	973.4E–6	–1.6E+0
549	34.00	44.00	40.39	–2.2E–6	973.4E–6	–1.6E+0
550	35.00	38.50	41.01	–2.2E–6	973.4E–6	–1.6E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
551	36.00	38.50	41.65	–2.2E–6	973.4E–6	–1.6E+0
552	36.00	38.50	41.69	–2.2E–6	973.4E–6	–1.6E+0
553	37.00	38.50	41.17	–2.2E–6	973.4E–6	–1.6E+0
554	39.00	36.00	40.47	–2.2E–6	973.4E–6	–1.6E+0
555	42.00	27.00	39.83	–2.2E–6	973.4E–6	–1.6E+0
556	45.00	62.00	39.39	–2.2E–6	973.4E–6	–1.6E+0
557	48.00	45.00	39.14	–2.2E–6	973.4E–6	–1.6E+0
558	51.00	15.00	38.99	–2.2E–6	973.4E–6	–1.6E+0
559	51.00	8.00	38.88	–2.2E–6	973.4E–6	–1.6E+0
560	51.00	6.00	38.86	–2.2E–6	973.4E–6	–1.6E+0
561	48.00	10.00	39.17	–717.3E–9	324.5E–6	–535.2E–3
562	46.00	11.00	39.37	717.3E–9	–324.5E–6	535.2E–3
563	44.00	13.00	38.63	2.2E–6	–973.4E–6	1.6E+0
564	41.00	17.00	36.96	2.2E–6	–973.4E–6	1.6E+0
565	37.00	20.00	34.87	2.2E–6	–973.4E–6	1.6E+0
566	34.00	20.00	32.73	2.2E–6	–973.4E–6	1.6E+0
567	30.00	17.00	30.53	2.2E–6	–973.4E–6	1.6E+0
568	26.00	14.00	28.27	2.2E–6	–973.4E–6	1.6E+0
569	23.00	7.00	26.02	2.2E–6	–973.4E–6	1.6E+0
570	19.00	2.00	23.76	2.2E–6	–973.4E–6	1.6E+0
571	15.00	([a])	21.37	2.2E–6	–973.4E–6	1.6E+0
572	11.00	([a])	18.79	2.2E–6	–973.4E–6	1.6E+0
573	8.00	([a])	16.06	2.2E–6	–973.4E–6	1.6E+0
574	5.00	([a])	13.05	2.2E–6	–973.4E–6	1.6E+0
575	2.00	([a])	9.54	2.2E–6	–973.4E–6	1.6E+0
576	0	0	4.59	2.2E–6	–973.4E–6	1.6E+0
577	0	0	0	2.2E–6	–973.4E–6	1.6E+0
578	0	0	0	2.2E–6	–973.4E–6	1.6E+0
579	0	0	0	2.2E–6	–973.4E–6	1.6E+0
580	0	0	0	8.8E–6	–7.4E–3	955.1E–3
581	0	0	0	15.4E–6	–13.9E–3	304.7E–3
582	0	0	0	22.0E–6	–20.3E–3	–345.7E–3
583	4.00	15.00	0	22.0E–6	–20.3E–3	–345.7E–3
584	19.00	31.00	0.78	22.0E–6	–20.3E–3	–345.7E–3
585	30.00	46.00	1.94	22.0E–6	–20.3E–3	–345.7E–3
586	37.00	68.00	3.83	22.0E–6	–20.3E–3	–345.7E–3
587	40.00	76.00	5.98	22.0E–6	–20.3E–3	–345.7E–3
588	41.00	77.00	8.07	22.0E–6	–20.3E–3	–345.7E–3
589	40.50	78.00	10.09	22.0E–6	–20.3E–3	–345.7E–3
590	40.00	77.00	10.29	22.0E–6	–20.3E–3	–345.7E–3
591	40.00	64.00	7.34	22.0E–6	–20.3E–3	–345.7E–3
592	38.00	10.00	3.27	22.0E–6	–20.3E–3	–345.7E–3
593	38.00	25.00	3.24	22.0E–6	–20.3E–3	–345.7E–3
594	40.00	50.00	5.98	22.0E–6	–20.3E–3	–345.7E–3
595	40.00	36.00	8.48	22.0E–6	–20.3E–3	–345.7E–3
596	40.00	31.00	11.00	22.0E–6	–20.3E–3	–345.7E–3
597	40.00	31.00	13.62	22.0E–6	–20.3E–3	–345.7E–3
598	41.00	37.00	16.07	22.0E–6	–20.3E–3	–345.7E–3
599	42.00	97.00	18.51	16.5E–6	–15.9E–3	–889.5E–3
600	43.00	100.00	21.51	11.0E–6	–11.4E–3	–1.4E+0
601	45.00	100.00	24.71	5.5E–6	–7.0E–3	–2.0E+0
602	47.00	100.00	27.57	5.5E–6	–7.0E–3	–2.0E+0
603	48.00	100.00	30.04	5.5E–6	–7.0E–3	–2.0E+0
604	49.00	100.00	32.22	5.5E–6	–7.0E–3	–2.0E+0
605	51.00	97.00	34.28	5.5E–6	–7.0E–3	–2.0E+0
606	52.00	94.00	36.22	5.5E–6	–7.0E–3	–2.0E+0
607	53.00	90.00	38.08	5.5E–6	–7.0E–3	–2.0E+0
608	54.00	87.00	39.83	5.5E–6	–7.0E–3	–2.0E+0
609	56.00	86.00	41.63	5.5E–6	–7.0E–3	–2.0E+0
610	56.00	85.00	43.18	5.5E–6	–7.0E–3	–2.0E+0
611	55.50	85.00	44.33	5.5E–6	–7.0E–3	–2.0E+0
612	55.00	81.00	45.38	5.5E–6	–7.0E–3	–2.0E+0
613	54.00	77.00	46.14	5.5E–6	–7.0E–3	–2.0E+0
614	53.00	72.00	46.39	5.5E–6	–7.0E–3	–2.0E+0
615	52.00	67.00	46.34	5.5E–6	–7.0E–3	–2.0E+0
616	49.00	60.00	46.24	5.5E–6	–7.0E–3	–2.0E+0
617	46.00	45.00	46.14	5.5E–6	–7.0E–3	–2.0E+0
618	45.00	12.00	46.05	5.5E–6	–7.0E–3	–2.0E+0
619	44.00	10.00	46.13	5.5E–6	–7.0E–3	–2.0E+0
620	44.00	10.00	46.49	5.5E–6	–7.0E–3	–2.0E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
621	45.00	12.00	46.78	5.5E–6	–7.0E–3	–2.0E+0
622	46.00	14.00	46.81	5.5E–6	–7.0E–3	–2.0E+0
623	47.00	24.00	46.95	5.5E–6	–7.0E–3	–2.0E+0
624	49.00	88.00	47.37	2.0E–6	–3.5E–3	–1.4E+0
625	50.00	90.00	47.62	–1.5E–6	–844.5E–9	–908.8E–3
626	51.00	90.00	47.58	–4.9E–6	3.5E–3	–374.8E–3
627	52.00	90.00	48.00	–4.9E–6	3.5E–3	–374.8E–3
628	53.00	90.00	48.46	–4.9E–6	3.5E–3	–374.8E–3
629	54.00	90.00	48.45	–4.9E–6	3.5E–3	–374.8E–3
630	54.00	90.00	48.40	–4.9E–6	3.5E–3	–374.8E–3
631	54.00	87.00	48.59	–4.9E–6	3.5E–3	–374.8E–3
632	54.00	84.00	49.30	–4.9E–6	3.5E–3	–374.8E–3
633	54.00	80.00	50.02	–4.9E–6	3.5E–3	–374.8E–3
634	53.50	77.00	50.27	–4.9E–6	3.5E–3	–374.8E–3
635	53.00	76.00	50.00	–4.9E–6	3.5E–3	–374.8E–3
636	53.00	75.00	49.73	–4.9E–6	3.5E–3	–374.8E–3
637	52.00	73.00	49.57	–4.9E–6	3.5E–3	–374.8E–3
638	51.00	69.00	49.31	–4.9E–6	3.5E–3	–374.8E–3
639	50.00	65.00	49.29	–4.9E–6	3.5E–3	–374.8E–3
640	50.00	60.00	49.71	–4.9E–6	3.5E–3	–374.8E–3
641	49.00	55.00	50.02	–4.9E–6	3.5E–3	–374.8E–3
642	49.00	50.00	50.05	–4.9E–6	3.5E–3	–374.8E–3
643	49.00	50.00	50.07	–4.9E–6	3.5E–3	–374.8E–3
644	49.50	60.00	50.33	–4.9E–6	3.5E–3	–374.8E–3
645	49.50	65.00	50.75	–4.9E–6	3.5E–3	–374.8E–3
646	50.00	70.00	51.03	–4.9E–6	3.5E–3	–374.8E–3
647	50.50	75.00	51.47	–4.9E–6	3.5E–3	–374.8E–3
648	51.00	80.00	51.92	–4.9E–6	3.5E–3	–374.8E–3
649	52.00	85.00	51.93	–5.9E–6	4.5E–3	–731.0E–3
650	53.00	90.00	51.90	–7.0E–6	5.4E–3	–1.1E+0
651	54.00	90.00	51.87	–8.0E–6	6.4E–3	–1.4E+0
652	55.00	90.00	51.85	–8.0E–6	6.4E–3	–1.4E+0
653	55.00	88.00	51.82	–8.0E–6	6.4E–3	–1.4E+0
654	55.00	84.00	51.82	–8.0E–6	6.4E–3	–1.4E+0
655	55.00	79.00	52.54	–8.0E–6	6.4E–3	–1.4E+0
656	55.00	74.00	53.59	–8.0E–6	6.4E–3	–1.4E+0
657	55.00	69.00	54.19	–8.0E–6	6.4E–3	–1.4E+0
658	55.00	64.00	54.26	–8.0E–6	6.4E–3	–1.4E+0
659	55.00	59.00	54.07	–8.0E–6	6.4E–3	–1.4E+0
660	55.00	54.00	53.93	–8.0E–6	6.4E–3	–1.4E+0
661	55.00	49.00	53.92	–8.0E–6	6.4E–3	–1.4E+0
662	55.00	44.50	53.90	–8.0E–6	6.4E–3	–1.4E+0
663	55.00	39.00	53.89	–8.0E–6	6.4E–3	–1.4E+0
664	55.00	34.00	53.88	–8.0E–6	6.4E–3	–1.4E+0
665	55.00	27.00	53.87	–8.0E–6	6.4E–3	–1.4E+0
666	55.00	18.00	53.85	–8.0E–6	6.4E–3	–1.4E+0
667	55.00	8.00	53.81	–8.0E–6	6.4E–3	–1.4E+0
668	55.00	6.00	53.67	–8.0E–6	6.4E–3	–1.4E+0
669	55.00	13.00	53.67	–8.0E–6	6.4E–3	–1.4E+0
670	55.00	27.00	54.32	–8.0E–6	6.4E–3	–1.4E+0
671	55.50	30.00	54.88	–8.0E–6	6.4E–3	–1.4E+0
672	56.00	30.00	54.87	–8.0E–6	6.4E–3	–1.4E+0
673	57.00	30.00	54.86	–8.0E–6	6.4E–3	–1.4E+0
674	58.00	34.00	54.75	–6.9E–6	5.3E–3	–816.0E–3
675	59.00	46.00	54.28	–5.8E–6	4.3E–3	–188.7E–3
676	59.00	89.00	53.84	–4.7E–6	3.3E–3	438.5E–3
677	59.00	90.00	54.02	–4.7E–6	3.3E–3	438.5E–3
678	59.00	91.00	54.48	–4.7E–6	3.3E–3	438.5E–3
679	59.00	91.00	54.76	–4.7E–6	3.3E–3	438.5E–3
680	60.00	91.00	54.84	–4.7E–6	3.3E–3	438.5E–3
681	60.00	91.00	54.87	–4.7E–6	3.3E–3	438.5E–3
682	60.50	90.00	54.90	–4.7E–6	3.3E–3	438.5E–3
683	61.00	89.00	54.93	–4.7E–6	3.3E–3	438.5E–3
684	61.50	88.00	54.97	–4.7E–6	3.3E–3	438.5E–3
685	62.00	83.00	55.00	–4.7E–6	3.3E–3	438.5E–3
686	63.00	73.00	55.03	–4.7E–6	3.3E–3	438.5E–3
687	65.00	70.00	55.06	–4.7E–6	3.3E–3	438.5E–3
688	66.00	71.00	55.10	–4.7E–6	3.3E–3	438.5E–3
689	67.00	74.00	55.12	–4.7E–6	3.3E–3	438.5E–3
690	67.50	79.00	55.15	–4.7E–6	3.3E–3	438.5E–3

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
691	68.00	85.00	55.16	–4.7E–6	3.3E–3	438.5E–3
692	68.50	90.00	55.18	–4.7E–6	3.3E–3	438.5E–3
693	69.00	94.00	55.33	–4.7E–6	3.3E–3	438.5E–3
694	69.50	96.00	55.85	–4.7E–6	3.3E–3	438.5E–3
695	70.00	98.00	56.52	–4.7E–6	3.3E–3	438.5E–3
696	70.50	100.00	57.05	–4.7E–6	3.3E–3	438.5E–3
697	71.00	100.00	57.31	–4.7E–6	3.3E–3	438.5E–3
698	72.00	100.00	57.35	–4.7E–6	3.3E–3	438.5E–3
699	72.00	100.00	57.34	–4.5E–6	3.0E–3	722.7E–3
700	72.00	100.00	57.34	–4.3E–6	2.8E–3	1.0E+0
701	72.00	100.00	57.33	–4.1E–6	2.5E–3	1.3E+0
702	72.00	100.00	57.33	–4.1E–6	2.5E–3	1.3E+0
703	72.00	100.00	57.33	–4.1E–6	2.5E–3	1.3E+0
704	72.00	100.00	57.32	–4.1E–6	2.5E–3	1.3E+0
705	72.00	100.00	57.31	–4.1E–6	2.5E–3	1.3E+0
706	72.00	100.00	57.30	–4.1E–6	2.5E–3	1.3E+0
707	72.50	100.00	57.39	–4.1E–6	2.5E–3	1.3E+0
708	73.00	100.00	57.71	–4.1E–6	2.5E–3	1.3E+0
709	73.50	100.00	58.14	–4.1E–6	2.5E–3	1.3E+0
710	74.00	100.00	58.34	–4.1E–6	2.5E–3	1.3E+0
711	74.00	100.00	58.34	–4.1E–6	2.5E–3	1.3E+0
712	74.50	100.00	58.33	–4.1E–6	2.5E–3	1.3E+0
713	75.00	100.00	58.33	–4.1E–6	2.5E–3	1.3E+0
714	75.00	100.00	58.32	–4.1E–6	2.5E–3	1.3E+0
715	75.00	100.00	58.31	–4.1E–6	2.5E–3	1.3E+0
716	75.00	100.00	58.30	–4.1E–6	2.5E–3	1.3E+0
717	75.00	100.00	58.30	–4.1E–6	2.5E–3	1.3E+0
718	75.00	100.00	58.30	–4.1E–6	2.5E–3	1.3E+0
719	75.00	100.00	58.30	–4.1E–6	2.5E–3	1.3E+0
720	75.00	100.00	58.48	–4.1E–6	2.5E–3	1.3E+0
721	75.00	100.00	58.92	–4.1E–6	2.5E–3	1.3E+0
722	75.00	100.00	59.26	–4.1E–6	2.5E–3	1.3E+0
723	75.00	98.00	59.34	–4.1E–6	2.5E–3	1.3E+0
724	75.00	90.00	59.32	–5.5E–6	3.7E–3	764.9E–3
725	75.00	34.00	59.37	–6.8E–6	5.0E–3	238.8E–3
726	74.00	15.00	59.67	–8.2E–6	6.2E–3	–287.4E–3
727	72.00	3.00	60.11	–8.2E–6	6.2E–3	–287.4E–3
728	70.00	([a])	60.32	–8.2E–6	6.2E–3	–287.4E–3
729	69.00	([a])	60.30	–8.2E–6	6.2E–3	–287.4E–3
730	68.00	([a])	60.29	–8.2E–6	6.2E–3	–287.4E–3
731	70.50	53.00	60.27	–8.2E–6	6.2E–3	–287.4E–3
732	73.00	80.00	60.26	–8.2E–6	6.2E–3	–287.4E–3
733	75.00	88.00	60.25	–8.2E–6	6.2E–3	–287.4E–3
734	77.00	94.00	60.18	–8.2E–6	6.2E–3	–287.4E–3
735	79.00	97.00	59.83	–8.2E–6	6.2E–3	–287.4E–3
736	82.00	97.00	59.36	–8.2E–6	6.2E–3	–287.4E–3
737	85.00	98.00	59.65	–8.2E–6	6.2E–3	–287.4E–3
738	85.00	98.00	60.12	–8.2E–6	6.2E–3	–287.4E–3
739	87.00	97.00	59.80	–8.2E–6	6.2E–3	–287.4E–3
740	90.00	95.00	59.82	–8.2E–6	6.2E–3	–287.4E–3
741	92.00	90.00	60.18	–8.2E–6	6.2E–3	–287.4E–3
742	93.00	88.00	60.27	–8.2E–6	6.2E–3	–287.4E–3
743	94.00	86.00	60.31	–8.2E–6	6.2E–3	–287.4E–3
744	95.00	83.00	60.35	–8.2E–6	6.2E–3	–287.4E–3
745	96.00	79.00	60.37	–8.2E–6	6.2E–3	–287.4E–3
746	97.00	74.00	60.35	–8.2E–6	6.2E–3	–287.4E–3
747	98.00	68.00	60.33	–8.2E–6	6.2E–3	–287.4E–3
748	99.00	62.00	60.30	–8.2E–6	6.2E–3	–287.4E–3
749	100.00	54.00	60.26	–9.9E–6	7.8E–3	–1.1E+0
750	100.00	30.00	60.45	–11.7E–6	9.5E–3	–1.9E+0
751	100.00	22.00	61.12	–13.4E–6	11.1E–3	–2.7E+0
752	100.00	20.00	61.91	–13.4E–6	11.1E–3	–2.7E+0
753	100.00	22.00	62.23	–13.4E–6	11.1E–3	–2.7E+0
754	100.00	30.00	62.19	–13.4E–6	11.1E–3	–2.7E+0
755	100.00	65.00	62.17	–13.4E–6	11.1E–3	–2.7E+0
756	100.00	76.00	62.19	–13.4E–6	11.1E–3	–2.7E+0
757	100.00	80.00	62.24	–13.4E–6	11.1E–3	–2.7E+0
758	100.00	78.00	62.28	–13.4E–6	11.1E–3	–2.7E+0
759	100.00	72.00	62.30	–13.4E–6	11.1E–3	–2.7E+0
760	100.00	54.00	62.79	–13.4E–6	11.1E–3	–2.7E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
761	95.00	30.00	63.22	–13.4E–6	11.1E–3	–2.7E+0
762	85.00	12.00	63.11	–13.4E–6	11.1E–3	–2.7E+0
763	68.00	([a])	62.97	–13.4E–6	11.1E–3	–2.7E+0
764	57.00	([a])	62.82	–13.4E–6	11.1E–3	–2.7E+0
765	56.00	([a])	62.67	–13.4E–6	11.1E–3	–2.7E+0
766	57.00	([a])	62.52	–13.4E–6	11.1E–3	–2.7E+0
767	57.00	([a])	62.37	–13.4E–6	11.1E–3	–2.7E+0
768	57.00	22.00	62.32	–13.4E–6	11.1E–3	–2.7E+0
769	58.00	40.00	62.45	–13.4E–6	11.1E–3	–2.7E+0
770	59.00	45.00	62.64	–13.4E–6	11.1E–3	–2.7E+0
771	59.00	46.00	62.69	–13.4E–6	11.1E–3	–2.7E+0
772	59.50	45.00	62.66	–13.4E–6	11.1E–3	–2.7E+0
773	60.00	33.00	62.62	–13.4E–6	11.1E–3	–2.7E+0
774	60.00	0	62.59	–12.6E–6	10.3E–3	–2.2E+0
775	60.00	([a])	62.55	–11.8E–6	9.5E–3	–1.8E+0
776	60.00	([a])	62.51	–10.9E–6	8.8E–3	–1.3E+0
777	60.00	34.00	62.44	–10.9E–6	8.8E–3	–1.3E+0
778	60.00	50.00	62.37	–10.9E–6	8.8E–3	–1.3E+0
779	60.00	60.00	62.29	–10.9E–6	8.8E–3	–1.3E+0
780	60.00	69.00	62.21	–10.9E–6	8.8E–3	–1.3E+0
781	60.00	75.00	62.15	–10.9E–6	8.8E–3	–1.3E+0
782	60.00	79.00	62.46	–10.9E–6	8.8E–3	–1.3E+0
783	61.00	83.00	63.40	–10.9E–6	8.8E–3	–1.3E+0
784	61.00	84.00	63.97	–10.9E–6	8.8E–3	–1.3E+0
785	61.00	85.00	63.98	–10.9E–6	8.8E–3	–1.3E+0
786	62.00	85.00	63.94	–10.9E–6	8.8E–3	–1.3E+0
787	62.00	85.00	63.93	–10.9E–6	8.8E–3	–1.3E+0
788	62.00	85.00	63.92	–10.9E–6	8.8E–3	–1.3E+0
789	63.00	85.00	63.92	–10.9E–6	8.8E–3	–1.3E+0
790	63.00	85.00	63.91	–10.9E–6	8.8E–3	–1.3E+0
791	64.00	85.00	64.21	–10.9E–6	8.8E–3	–1.3E+0
792	64.00	85.00	64.61	–10.9E–6	8.8E–3	–1.3E+0
793	64.00	85.00	64.50	–10.9E–6	8.8E–3	–1.3E+0
794	64.00	85.00	64.05	–10.9E–6	8.8E–3	–1.3E+0
795	64.00	85.00	63.83	–10.9E–6	8.8E–3	–1.3E+0
796	64.00	84.50	63.81	–10.9E–6	8.8E–3	–1.3E+0
797	64.00	84.00	63.79	–10.9E–6	8.8E–3	–1.3E+0
798	64.00	83.00	63.77	–10.9E–6	8.8E–3	–1.3E+0
799	64.00	82.00	63.76	–11.1E–6	8.9E–3	–1.2E+0
800	64.00	81.00	63.75	–11.2E–6	9.0E–3	–1.2E+0
801	64.00	77.00	63.73	–11.4E–6	9.1E–3	–1.1E+0
802	64.00	72.00	63.72	–11.4E–6	9.1E–3	–1.1E+0
803	65.00	67.00	63.70	–11.4E–6	9.1E–3	–1.1E+0
804	66.00	64.00	63.69	–11.4E–6	9.1E–3	–1.1E+0
805	67.00	60.00	63.69	–11.4E–6	9.1E–3	–1.1E+0
806	69.00	62.30	63.68	–11.4E–6	9.1E–3	–1.1E+0
807	72.00	84.00	64.10	–11.4E–6	9.1E–3	–1.1E+0
808	73.00	90.50	64.60	–11.4E–6	9.1E–3	–1.1E+0
809	74.00	91.00	64.73	–11.4E–6	9.1E–3	–1.1E+0
810	74.00	90.00	64.73	–11.4E–6	9.1E–3	–1.1E+0
811	74.00	84.50	64.73	–11.4E–6	9.1E–3	–1.1E+0
812	73.00	74.00	64.72	–11.4E–6	9.1E–3	–1.1E+0
813	72.00	66.00	64.71	–11.4E–6	9.1E–3	–1.1E+0
814	71.00	60.00	64.71	–11.4E–6	9.1E–3	–1.1E+0
815	70.00	54.00	64.70	–11.4E–6	9.1E–3	–1.1E+0
816	69.00	50.00	64.69	–11.4E–6	9.1E–3	–1.1E+0
817	68.00	49.00	64.68	–11.4E–6	9.1E–3	–1.1E+0
818	68.00	48.00	64.82	–11.4E–6	9.1E–3	–1.1E+0
819	68.00	48.00	65.27	–11.4E–6	9.1E–3	–1.1E+0
820	68.00	48.50	65.65	–11.4E–6	9.1E–3	–1.1E+0
821	68.00	49.00	65.71	–11.4E–6	9.1E–3	–1.1E+0
822	68.00	51.00	65.72	–11.4E–6	9.1E–3	–1.1E+0
823	68.00	53.50	65.72	–11.4E–6	9.1E–3	–1.1E+0
824	68.00	55.00	65.72	–11.4E–6	9.1E–3	–1.1E+0
825	68.00	58.00	65.71	–11.4E–6	9.1E–3	–1.1E+0
826	68.00	60.00	65.70	–11.4E–6	9.1E–3	–1.1E+0
827	68.00	62.00	65.69	–11.4E–6	9.1E–3	–1.1E+0
828	68.00	64.00	65.67	–11.4E–6	9.1E–3	–1.1E+0
829	68.00	67.00	65.27	–11.4E–6	9.1E–3	–1.1E+0
830	69.00	68.50	64.33	–11.4E–6	9.1E–3	–1.1E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
831	70.00	70.00	63.65	–11.4E–6	9.1E–3	–1.1E+0
832	70.00	70.00	63.50	–11.4E–6	9.1E–3	–1.1E+0
833	70.00	70.00	63.49	–11.4E–6	9.1E–3	–1.1E+0
834	70.00	70.00	63.49	–11.4E–6	9.1E–3	–1.1E+0
835	70.00	70.00	63.37	–11.4E–6	9.1E–3	–1.1E+0
836	70.00	70.00	63.01	–11.4E–6	9.1E–3	–1.1E+0
837	71.00	66.00	62.60	–11.4E–6	9.1E–3	–1.1E+0
838	73.00	64.00	62.44	–11.4E–6	9.1E–3	–1.1E+0
839	75.00	64.00	62.45	–8.3E–6	6.1E–3	362.3E–3
840	77.00	98.00	62.47	–5.1E–6	3.2E–3	1.8E+0
841	79.00	100.00	62.50	–2.0E–6	233.7E–6	3.3E+0
842	81.00	100.00	62.52	–2.0E–6	233.7E–6	3.3E+0
843	82.00	100.00	62.54	–2.0E–6	233.7E–6	3.3E+0
844	83.00	100.00	62.57	–2.0E–6	233.7E–6	3.3E+0
845	84.00	98.00	62.70	–2.0E–6	233.7E–6	3.3E+0
846	84.00	94.00	62.90	–2.0E–6	233.7E–6	3.3E+0
847	85.00	93.00	63.11	–2.0E–6	233.7E–6	3.3E+0
848	86.00	94.00	63.32	–2.0E–6	233.7E–6	3.3E+0
849	87.00	98.00	63.53	–2.0E–6	233.7E–6	3.3E+0
850	89.00	100.00	63.74	–2.0E–6	233.7E–6	3.3E+0
851	92.00	100.00	62.20	–2.0E–6	233.7E–6	3.3E+0
852	95.00	100.00	62.67	–2.0E–6	233.7E–6	3.3E+0
853	97.50	100.00	63.19	–2.0E–6	233.7E–6	3.3E+0
854	100.00	100.00	63.62	–2.0E–6	233.7E–6	3.3E+0
855	100.00	100.00	64.06	–665.4E–9	77.9E–6	1.1E+0
856	100.00	100.00	64.19	665.4E–9	–77.9E–6	–1.1E+0
857	100.00	100.00	63.87	2.0E–6	–233.7E–6	–3.3E+0
858	100.00	97.00	63.38	2.0E–6	–233.7E–6	–3.3E+0
859	96.00	([a])	62.62	2.0E–6	–233.7E–6	–3.3E+0
860	94.00	([a])	61.32	2.0E–6	–233.7E–6	–3.3E+0
861	91.00	([a])	59.72	2.0E–6	–233.7E–6	–3.3E+0
862	88.00	([a])	58.30	2.0E–6	–233.7E–6	–3.3E+0
863	86.00	([a])	57.08	2.0E–6	–233.7E–6	–3.3E+0
864	84.00	([a])	55.85	2.0E–6	–233.7E–6	–3.3E+0
865	82.00	([a])	54.61	2.0E–6	–233.7E–6	–3.3E+0
866	79.00	([a])	53.36	2.0E–6	–233.7E–6	–3.3E+0
867	77.00	([a])	52.10	2.0E–6	–233.7E–6	–3.3E+0
868	75.00	([a])	50.74	2.0E–6	–233.7E–6	–3.3E+0
869	73.00	([a])	49.34	2.0E–6	–233.7E–6	–3.3E+0
870	72.00	([a])	48.05	2.0E–6	–233.7E–6	–3.3E+0
871	72.00	([a])	46.82	2.0E–6	–233.7E–6	–3.3E+0
872	72.00	([a])	45.61	2.0E–6	–233.7E–6	–3.3E+0
873	71.00	8.00	44.37	2.0E–6	–233.7E–6	–3.3E+0
874	68.00	9.00	43.06	2.0E–6	–233.7E–6	–3.3E+0
875	64.00	([a])	41.65	2.0E–6	–233.7E–6	–3.3E+0
876	58.00	([a])	40.32	2.0E–6	–233.7E–6	–3.3E+0
877	56.00	53.00	39.28	2.0E–6	–233.7E–6	–3.3E+0
878	56.00	67.00	38.40	2.0E–6	–233.7E–6	–3.3E+0
879	56.00	70.00	37.30	2.0E–6	–233.7E–6	–3.3E+0
880	56.00	67.00	35.79	2.0E–6	–233.7E–6	–3.3E+0
881	55.00	60.00	34.14	2.0E–6	–233.7E–6	–3.3E+0
882	54.00	60.00	32.69	2.0E–6	–233.7E–6	–3.3E+0
883	49.00	75.00	31.38	2.0E–6	–233.7E–6	–3.3E+0
884	38.00	80.00	29.63	2.0E–6	–233.7E–6	–3.3E+0
885	30.00	78.00	27.22	2.0E–6	–233.7E–6	–3.3E+0
886	25.00	53.00	25.01	2.0E–6	–233.7E–6	–3.3E+0
887	18.00	32.00	23.09	2.0E–6	–233.7E–6	–3.3E+0
888	14.00	16.00	20.23	2.0E–6	–233.7E–6	–3.3E+0
889	9.00	3.00	17.20	2.0E–6	–233.7E–6	–3.3E+0
890	5.00	([a])	12.61	2.0E–6	–233.7E–6	–3.3E+0
891	1.00	([a])	7.43	2.0E–6	–233.7E–6	–3.3E+0
892	0	0	2.81	2.0E–6	–233.7E–6	–3.3E+0
893	0	0	0	2.0E–6	–233.7E–6	–3.3E+0
894	0	0	0	2.0E–6	–233.7E–6	–3.3E+0
895	0	0	0	2.0E–6	–233.7E–6	–3.3E+0
896	0	0	0	2.0E–6	–233.7E–6	–3.3E+0
987	0	0	0	2.0E–6	–233.7E–6	–3.3E+0
898	0	0	0	2.0E–6	–233.7E–6	–3.3E+0
899	0	0	0	2.0E–6	–233.7E–6	–3.3E+0
900	0	0	0	10.3E–6	–8.6E–3	–677.9E–3

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
901	0	0	0	18.6E–6	–16.9E–3	1.9E+0
902	0	0	0	26.9E–6	–25.2E–3	4.6E+0
903	0	0	0	26.9E–6	–25.2E–3	4.6E+0
904	0	0	0	26.9E–6	–25.2E–3	4.6E+0
905	0	0	0	26.9E–6	–25.2E–3	4.6E+0
906	0	0	0	26.9E–6	–25.2E–3	4.6E+0
907	0	0	0	26.9E–6	–25.2E–3	4.6E+0
908	0	0	0	26.9E–6	–25.2E–3	4.6E+0
909	0	0	0	26.9E–6	–25.2E–3	4.6E+0
910	0	0	0	26.9E–6	–25.2E–3	4.6E+0
911	0	0	0	26.9E–6	–25.2E–3	4.6E+0
912	0	0	0	26.9E–6	–25.2E–3	4.6E+0
913	0	0	0	26.9E–6	–25.2E–3	4.6E+0
914	0	0	0	26.9E–6	–25.2E–3	4.6E+0
915	0	0	0	26.9E–6	–25.2E–3	4.6E+0
916	0	0	0	26.9E–6	–25.2E–3	4.6E+0
917	0	0	0	26.9E–6	–25.2E–3	4.6E+0
918	0	0	0	26.9E–6	–25.2E–3	4.6E+0
919	0	0	0	26.9E–6	–25.2E–3	4.6E+0
920	4.50	47.00	2.63	26.9E–6	–25.2E–3	4.6E+0
921	12.00	85.00	4.93	26.9E–6	–25.2E–3	4.6E+0
922	30.00	97.00	7.24	26.9E–6	–25.2E–3	4.6E+0
923	42.00	100.00	9.73	26.9E–6	–25.2E–3	4.6E+0
924	51.00	100.00	11.91	26.9E–6	–25.2E–3	4.6E+0
925	54.00	100.00	14.16	26.9E–6	–25.2E–3	4.6E+0
926	54.00	97.00	16.04	26.9E–6	–25.2E–3	4.6E+0
927	52.00	90.00	17.98	26.9E–6	–25.2E–3	4.6E+0
928	48.00	75.00	20.21	26.9E–6	–25.2E–3	4.6E+0
929	44.00	57.00	22.03	9.0E–6	–8.4E–3	1.5E+0
930	37.00	47.00	22.35	–9.0E–6	8.4E–3	–1.5E+0
931	29.00	40.00	21.52	–26.9E–6	25.2E–3	–4.6E+0
932	24.00	34.00	20.04	–26.9E–6	25.2E–3	–4.6E+0
933	21.00	27.00	18.29	–26.9E–6	25.2E–3	–4.6E+0
934	22.00	24.00	16.40	–26.9E–6	25.2E–3	–4.6E+0
935	22.50	22.00	14.40	–26.9E–6	25.2E–3	–4.6E+0
936	20.00	16.00	12.23	–26.9E–6	25.2E–3	–4.6E+0
937	15.00	7.00	9.84	–26.9E–6	25.2E–3	–4.6E+0
938	10.00	0	8.55	–26.9E–6	25.2E–3	–4.6E+0
939	5.00	([a])	7.56	–26.9E–6	25.2E–3	–4.6E+0
940	2.00	([a])	6.14	–26.9E–6	25.2E–3	–4.6E+0
941	1.00	([a])	2.60	–26.9E–6	25.2E–3	–4.6E+0
942	0	0	0	–26.9E–6	25.2E–3	–4.6E+0
943	0	0	0	–16.7E–6	15.4E–3	–3.2E+0
944	0	0	0	–6.5E–6	5.6E–3	–1.8E+0
945	1.00	0	1.06	3.7E–6	–4.2E–3	–457.1E–3
946	5.00	20.00	2.16	3.7E–6	–4.2E–3	–457.1E–3
947	15.00	43.00	3.30	3.7E–6	–4.2E–3	–457.1E–3
948	28.00	52.00	4.37	3.7E–6	–4.2E–3	–457.1E–3
949	34.00	64.00	5.42	3.7E–6	–4.2E–3	–457.1E–3
950	37.00	74.00	6.47	3.7E–6	–4.2E–3	–457.1E–3
951	37.50	90.00	7.51	3.7E–6	–4.2E–3	–457.1E–3
952	37.00	56.00	8.55	3.7E–6	–4.2E–3	–457.1E–3
953	36.00	27.00	9.55	3.7E–6	–4.2E–3	–457.1E–3
954	35.00	([a])	10.25	3.7E–6	–4.2E–3	–457.1E–3
955	33.00	([a])	10.78	3.7E–6	–4.2E–3	–457.1E–3
956	29.00	([a])	11.16	3.7E–6	–4.2E–3	–457.1E–3
957	29.00	([a])	11.76	3.7E–6	–4.2E–3	–457.1E–3
958	29.00	([a])	12.59	3.7E–6	–4.2E–3	–457.1E–3
959	34.00	30.00	13.80	3.7E–6	–4.2E–3	–457.1E–3
960	38.00	75.00	14.85	3.7E–6	–4.2E–3	–457.1E–3
961	34.00	70.00	15.59	3.7E–6	–4.2E–3	–457.1E–3
962	31.00	25.00	16.20	3.7E–6	–4.2E–3	–457.1E–3
963	28.00	([a])	16.82	3.7E–6	–4.2E–3	–457.1E–3
964	26.00	([a])	17.55	3.7E–6	–4.2E–3	–457.1E–3
965	24.00	([a])	17.91	3.7E–6	–4.2E–3	–457.1E–3
966	23.00	4.00	18.08	3.7E–6	–4.2E–3	–457.1E–3
967	23.00	22.00	18.10	3.7E–6	–4.2E–3	–457.1E–3
968	24.00	30.00	18.31	3.7E–6	–4.2E–3	–457.1E–3
969	23.00	32.00	18.67	7.3E–6	–7.4E–3	1.9E+0
970	22.00	25.00	19.23	10.9E–6	–10.7E–3	4.4E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
971	18.00	18.00	19.69	14.5E–6	–14.0E–3	6.8E+0
972	16.00	14.00	20.02	14.5E–6	–14.0E–3	6.8E+0
973	15.00	10.00	19.94	14.5E–6	–14.0E–3	6.8E+0
974	15.00	0.0	19.80	14.5E–6	–14.0E–3	6.8E+0
975	15.00	(a)	19.69	14.5E–6	–14.0E–3	6.8E+0
976	15.00	(a)	19.76	14.5E–6	–14.0E–3	6.8E+0
977	18.00	(a)	19.93	14.5E–6	–14.0E–3	6.8E+0
978	25.00	40.00	20.24	14.5E–6	–14.0E–3	6.8E+0
979	37.00	90.00	20.69	14.5E–6	–14.0E–3	6.8E+0
980	46.00	90.00	21.23	14.5E–6	–14.0E–3	6.8E+0
981	49.00	90.00	21.78	14.5E–6	–14.0E–3	6.8E+0
982	49.00	90.00	22.15	14.5E–6	–14.0E–3	6.8E+0
983	49.00	85.00	22.33	14.5E–6	–14.0E–3	6.8E+0
984	47.00	77.00	22.36	4.8E–6	–4.7E–3	2.3E+0
985	44.00	59.00	22.36	–4.8E–6	4.7E–3	–2.3E+0
986	43.00	36.00	22.33	–14.5E–6	14.0E–3	–6.8E+0
987	42.00	13.00	22.15	–14.5E–6	14.0E–3	–6.8E+0
988	40.00	(a)	21.91	–14.5E–6	14.0E–3	–6.8E+0
989	41.00	65.00	21.62	–14.5E–6	14.0E–3	–6.8E+0
990	44.00	65.00	21.32	–14.5E–6	14.0E–3	–6.8E+0
991	45.00	65.00	21.01	–14.5E–6	14.0E–3	–6.8E+0
992	45.00	62.00	20.70	–14.5E–6	14.0E–3	–6.8E+0
993	44.00	56.00	20.48	–14.5E–6	14.0E–3	–6.8E+0
994	42.00	46.00	20.31	–14.5E–6	14.0E–3	–6.8E+0
995	41.00	36.00	20.13	–14.5E–6	14.0E–3	–6.8E+0
996	39.00	20.00	19.86	–14.5E–6	14.0E–3	–6.8E+0
997	38.00	4.00	19.49	–14.5E–6	14.0E–3	–6.8E+0
998	37.00	33.00	19.11	–14.5E–6	14.0E–3	–6.8E+0
999	38.00	39.00	18.71	–14.5E–6	14.0E–3	–6.8E+0
1,000	36.00	40.00	18.30	–14.5E–6	14.0E–3	–6.8E+0
1,001	35.00	40.00	17.86	–14.5E–6	14.0E–3	–6.8E+0
1,002	33.00	39.00	17.39	–14.5E–6	14.0E–3	–6.8E+0
1,003	30.00	36.00	16.86	–14.5E–6	14.0E–3	–6.8E+0
1,004	27.00	33.00	16.31	–14.5E–6	14.0E–3	–6.8E+0
1,005	22.00	24.00	15.75	–14.5E–6	14.0E–3	–6.8E+0
1,006	21.00	(a)	15.24	–14.5E–6	14.0E–3	–6.8E+0
1,007	20.00	(a)	14.73	–14.5E–6	14.0E–3	–6.8E+0
1,008	18.00	(a)	14.23	–14.5E–6	14.0E–3	–6.8E+0
1,009	17.00	28.00	13.73	–14.5E–6	14.0E–3	–6.8E+0
1,010	16.00	5.00	12.79	–14.5E–6	14.0E–3	–6.8E+0
1,011	14.00	(a)	11.11	–14.5E–6	14.0E–3	–6.8E+0
1,012	12.00	(a)	9.43	–14.5E–6	14.0E–3	–6.8E+0
1,013	9.00	(a)	7.75	–14.5E–6	14.0E–3	–6.8E+0
1,014	7.00	(a)	6.07	–4.8E–6	4.7E–3	–2.3E+0
1,015	5.00	(a)	4.39	4.8E–6	–4.7E–3	2.3E+0
1,016	4.00	(a)	2.71	14.5E–6	–14.0E–3	6.8E+0
1,017	3.00	(a)	1.03	14.5E–6	–14.0E–3	6.8E+0
1,018	2.00	(a)	0.19	14.5E–6	–14.0E–3	6.8E+0
1,019	0	0	0	14.5E–6	–14.0E–3	6.8E+0
1,020	0	0	0	14.2E–6	–14.4E–3	5.4E+0
1,021	0	0	0	13.9E–6	–14.9E–3	4.1E+0
1,022	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,023	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,024	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,025	2.00	7.00	3.25	13.7E–6	–15.3E–3	2.7E+0
1,026	6.00	15.00	5.47	13.7E–6	–15.3E–3	2.7E+0
1,027	10.00	28.00	6.71	13.7E–6	–15.3E–3	2.7E+0
1,028	11.00	26.00	6.71	4.6E–6	–5.1E–3	900.3E–3
1,029	10.00	10.00	6.71	–4.6E–6	5.1E–3	–900.3E–3
1,030	8.00	3.00	6.55	–13.7E–6	15.3E–3	–2.7E+0
1,031	5.00	0	6.01	–13.7E–6	15.3E–3	–2.7E+0
1,032	2.00	0	5.15	–13.7E–6	15.3E–3	–2.7E+0
1,033	0	0	3.90	–13.7E–6	15.3E–3	–2.7E+0
1,034	0	0	2.19	–4.6E–6	5.1E–3	–900.3E–3
1,035	0	0	0	4.6E–6	–5.1E–3	900.3E–3
1,036	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,037	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,038	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,039	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,040	0	0	0	13.7E–6	–15.3E–3	2.7E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
1,041	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,042	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,043	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,044	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,045	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,046	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,047	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,048	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,049	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,050	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,051	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,052	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,053	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,054	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,055	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,056	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,057	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,058	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,059	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,060	0	0	0	13.7E–6	–15.3E–3	2.7E+0
1,061	4.00	5.00	1.95	13.7E–6	–15.3E–3	2.7E+0
1,062	11.00	35.00	3.70	13.7E–6	–15.3E–3	2.7E+0
1,063	21.00	73.00	5.53	13.7E–6	–15.3E–3	2.7E+0
1,064	25.00	86.00	7.22	13.7E–6	–15.3E–3	2.7E+0
1,065	26.00	90.00	8.64	13.7E–6	–15.3E–3	2.7E+0
1,066	25.00	90.00	10.33	4.6E–6	–5.1E–3	900.3E–3
1,067	23.00	83.00	11.18	–4.6E–6	5.1E–3	–900.3E–3
1,068	20.00	32.00	10.57	–13.7E–6	15.3E–3	–2.7E+0
1,069	16.00	(a)	9.33	–13.7E–6	15.3E–3	–2.7E+0
1,070	14.00	(a)	7.87	–13.7E–6	15.3E–3	–2.7E+0
1,071	10.00	(a)	6.27	–13.7E–6	15.3E–3	–2.7E+0
1,072	7.00	(a)	4.58	–13.7E–6	15.3E–3	–2.7E+0
1,073	3.00	(a)	3.81	–13.7E–6	15.3E–3	–2.7E+0
1,074	1.00	(a)	2.35	–13.7E–6	15.3E–3	–2.7E+0
1,075	0	0	0	–4.8E–6	6.2E–3	–2.3E+0
1,076	0	0	0	4.0E–6	–2.8E–3	–1.9E+0
1,077	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,078	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,079	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,080	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,081	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,082	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,083	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,084	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,085	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,086	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,087	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,088	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,089	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,090	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,091	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,092	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,093	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,094	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,095	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,096	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,097	0	0	0	12.8E–6	–11.9E–3	–1.6E+0
1,098	1.00	3.00	1.35	12.8E–6	–11.9E–3	–1.6E+0
1,099	3.00	6.00	3.37	12.8E–6	–11.9E–3	–1.6E+0
1,100	6.00	13.00	6.40	12.8E–6	–11.9E–3	–1.6E+0
1,101	9.00	14.00	8.47	12.8E–6	–11.9E–3	–1.6E+0
1,102	12.00	16.00	9.57	12.8E–6	–11.9E–3	–1.6E+0
1,103	15.00	28.00	10.19	12.8E–6	–11.9E–3	–1.6E+0
1,104	18.00	60.00	10.35	12.8E–6	–11.9E–3	–1.6E+0
1,105	20.00	47.00	10.46	12.8E–6	–11.9E–3	–1.6E+0
1,106	21.00	31.00	10.11	12.8E–6	–11.9E–3	–1.6E+0
1,107	21.00	15.00	9.12	12.0E–6	–11.3E–3	85.4E–3
1,108	20.00	(a)	7.81	11.1E–6	–10.7E–3	1.7E+0
1,109	20.00	(a)	7.87	10.3E–6	–10.1E–3	3.4E+0
1,110	20.00	(a)	9.57	10.3E–6	–10.1E–3	3.4E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
1,111	20.00	70.00	9.75	10.3E–6	–10.1E–3	3.4E+0
1,112	21.00	83.00	9.84	10.3E–6	–10.1E–3	3.4E+0
1,113	22.00	84.00	9.96	3.4E–6	–3.4E–3	1.1E+0
1,114	22.00	83.00	10.13	–3.4E–6	3.4E–3	–1.1E+0
1,115	18.00	78.00	9.36	–10.3E–6	10.1E–3	–3.4E+0
1,116	14.00	68.00	8.80	–10.3E–6	10.1E–3	–3.4E+0
1,117	8.00	10.00	7.67	–10.3E–6	10.1E–3	–3.4E+0
1,118	4.00	4.00	6.08	–10.3E–6	10.1E–3	–3.4E+0
1,119	1.00	0.0	4.03	–3.4E–6	3.4E–3	–1.1E+0
1,120	0	0	0	3.4E–6	–3.4E–3	1.1E+0
1,121	0	0	0	10.3E–6	–10.1E–3	3.4E+0
1,122	0	0	0	10.3E–6	–10.1E–3	3.4E+0
1,123	0	0	0	10.3E–6	–10.1E–3	3.4E+0
1,124	0	0	0	10.3E–6	–10.1E–3	3.4E+0
1,125	0	1.00	0	10.3E–6	–10.1E–3	3.4E+0
1,126	1.00	5.00	3.25	10.3E–6	–10.1E–3	3.4E+0
1,127	5.00	18.00	5.47	10.3E–6	–10.1E–3	3.4E+0
1,128	9.00	19.00	6.71	10.3E–6	–10.1E–3	3.4E+0
1,129	12.00	18.00	6.71	10.3E–6	–10.1E–3	3.4E+0
1,130	12.00	15.00	6.71	10.3E–6	–10.1E–3	3.4E+0
1,131	9.00	10.00	6.55	10.3E–6	–10.1E–3	3.4E+0
1,132	5.00	5.00	6.01	10.3E–6	–10.1E–3	3.4E+0
1,133	2.00	2.00	5.15	10.3E–6	–10.1E–3	3.4E+0
1,134	0	0	3.90	10.3E–6	–10.1E–3	3.4E+0
1,135	0	0	2.19	6.9E–6	–6.8E–3	2.2E+0
1,136	0	0	0	3.4E–6	–3.4E–3	1.1E+0
1,137	0	0	0	0	0	0
1,138	0	0	0	0	0	0
1,139	0	0	0	0	0	0
1,140	0	0	0	0	0	0
1,141	0	0	0	0	0	0
1,142	0	0	0	0	0	0
1,143	0	0	0	0	0	0
1,144	0	0	0	0	0	0
1,145	0	0	0	0	0	0
1,146	0	0	0	0	0	0
1,147	0	0	0	0	0	0
1,148	0	0	0	0	0	0
1,149	0	0	0	0	0	0
1,150	0	0	0	0	0	0
1,151	0	0	0	0	0	0
1,152	0	0	0	0	0	0
1,153	0	0	0	0	0	0
1,154	0	0	0	0	0	0
1,155	0	0	0	0	0	0
1,156	0	0	0	0	0	0
1,157	0	0	0	0	0	0
1,158	0	0	0	0	0	0
1,159	0	0	0	0	0	0
1,160	0	0	0	0	0	0
1,161	0	0	0	0	0	0
1,162	0	0	0	0	0	0
1,163	0	0	0	0	0	0
1,164	0	0	0	0	0	0
1,165	0	0	0	0	0	0
1,166	0	0	0	0	0	0
1,167	0	0	0	0	0	0

[a] Closed throttle motoring.

(c) The following transient duty cycle applies for compression-ignition engines and powertrains:

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
1	0	0	0	0	0	0
2	0	0	0	9.1E–6	–9.1E–3	898.8E–3
3	0	0	0	13.6E–6	–13.7E–3	1.3E+0
4	0	0	0	13.6E–6	–13.7E–3	1.3E+0
5	0	0	0	13.6E–6	–13.7E–3	1.3E+0
6	0	0	0	13.6E–6	–13.7E–3	1.3E+0
7	0	0	0	13.6E–6	–13.7E–3	1.3E+0
8	0	0	0	13.6E–6	–13.7E–3	1.3E+0
9	0	0	0	13.6E–6	–13.7E–3	1.3E+0
10	0	0	0	13.6E–6	–13.7E–3	1.3E+0
11	0	0	0	13.6E–6	–13.7E–3	1.3E+0
12	0	0	0	13.6E–6	–13.7E–3	1.3E+0
13	0	0	0	13.6E–6	–13.7E–3	1.3E+0
14	0	0	0	13.6E–6	–13.7E–3	1.3E+0
15	0	0	0	13.6E–6	–13.7E–3	1.3E+0
16	0	0	0	13.6E–6	–13.7E–3	1.3E+0
17	0	0	0	13.6E–6	–13.7E–3	1.3E+0
18	0	0	0	13.6E–6	–13.7E–3	1.3E+0
19	0	0	0	13.6E–6	–13.7E–3	1.3E+0
20	0	0	0	13.6E–6	–13.7E–3	1.3E+0
21	0	0	0	13.6E–6	–13.7E–3	1.3E+0
22	0	0	0	13.6E–6	–13.7E–3	1.3E+0
23	0	0	0	13.6E–6	–13.7E–3	1.3E+0
24	0	0	0	13.6E–6	–13.7E–3	1.3E+0
25	0	3.67	0	13.6E–6	–13.7E–3	1.3E+0
26	0	47.69	0	13.6E–6	–13.7E–3	1.3E+0
27	2.78	59.41	0.33	13.6E–6	–13.7E–3	1.3E+0
28	8.12	84.54	1.67	13.6E–6	–13.7E–3	1.3E+0
29	13.95	80.00	2.83	13.6E–6	–13.7E–3	1.3E+0
30	29.90	80.00	4.02	13.6E–6	–13.7E–3	1.3E+0
31	33.87	79.29	5.64	13.6E–6	–13.7E–3	1.3E+0
32	27.86	38.25	7.39	13.6E–6	–13.7E–3	1.3E+0
33	19.63	26.67	8.83	13.6E–6	–13.7E–3	1.3E+0
34	26.79	15.10	9.15	13.6E–6	–13.7E–3	1.3E+0
35	19.85	16.47	9.70	13.6E–6	–13.7E–3	1.3E+0
36	17.51	28.05	11.37	13.6E–6	–13.7E–3	1.3E+0
37	17.86	20.38	13.04	13.6E–6	–13.7E–3	1.3E+0
38	16.37	([a])	14.74	13.6E–6	–13.7E–3	1.3E+0
39	5.85	([a])	16.41	14.3E–6	–14.9E–3	3.6E+0
40	14.13	([a])	16.85	15.0E–6	–16.1E–3	5.8E+0
41	21.10	([a])	16.09	15.7E–6	–17.3E–3	8.1E+0
42	15.63	([a])	15.23	15.7E–6	–17.3E–3	8.1E+0
43	12.67	62.52	14.22	15.7E–6	–17.3E–3	8.1E+0
44	14.86	69.36	13.02	15.7E–6	–17.3E–3	8.1E+0
45	24.79	60.00	12.47	15.7E–6	–17.3E–3	8.1E+0
46	33.06	63.79	13.05	15.7E–6	–17.3E–3	8.1E+0
47	42.29	75.36	14.26	15.7E–6	–17.3E–3	8.1E+0
48	48.90	80.00	15.09	15.7E–6	–17.3E–3	8.1E+0
49	51.52	80.00	15.42	15.7E–6	–17.3E–3	8.1E+0
50	48.24	79.92	15.96	15.7E–6	–17.3E–3	8.1E+0
51	51.79	65.03	16.58	15.7E–6	–17.3E–3	8.1E+0
52	52.37	43.23	17.61	15.7E–6	–17.3E–3	8.1E+0
53	56.14	50.00	18.33	15.7E–6	–17.3E–3	8.1E+0
54	62.35	50.00	18.65	15.7E–6	–17.3E–3	8.1E+0
55	64.29	42.05	19.67	15.7E–6	–17.3E–3	8.1E+0
56	67.69	40.00	20.47	15.7E–6	–17.3E–3	8.1E+0
57	75.20	42.20	20.57	15.7E–6	–17.3E–3	8.1E+0
58	74.88	41.28	20.68	15.7E–6	–17.3E–3	8.1E+0
59	71.92	([a])	21.56	15.7E–6	–17.3E–3	8.1E+0
60	71.88	([a])	23.19	15.7E–6	–17.3E–3	8.1E+0
61	69.64	([a])	23.64	5.2E–6	–5.8E–3	2.7E+0
62	71.24	([a])	22.75	–5.2E–6	5.8E–3	–2.7E+0
63	71.72	30.54	21.81	–15.7E–6	17.3E–3	–8.1E+0
64	76.41	42.12	20.79	–15.7E–6	17.3E–3	–8.1E+0
65	73.02	50.00	19.86	–15.7E–6	17.3E–3	–8.1E+0
66	69.64	50.00	19.18	–15.7E–6	17.3E–3	–8.1E+0
67	72.09	43.16	18.75	–15.7E–6	17.3E–3	–8.1E+0
68	82.23	73.65	18.43	–15.7E–6	17.3E–3	–8.1E+0
69	78.58	([a])	18.61	–15.7E–6	17.3E–3	–8.1E+0
70	75.00	([a])	19.11	–15.7E–6	17.3E–3	–8.1E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
71	75.00	([a])	18.76	–15.7E–6	17.3E–3	–8.1E+0
72	72.47	([a])	17.68	–15.7E–6	17.3E–3	–8.1E+0
73	62.91	([a])	16.46	–15.7E–6	17.3E–3	–8.1E+0
74	58.93	13.57	15.06	–15.7E–6	17.3E–3	–8.1E+0
75	55.56	29.43	13.41	–15.7E–6	17.3E–3	–8.1E+0
76	57.14	20.00	11.91	–15.7E–6	17.3E–3	–8.1E+0
77	56.68	17.42	11.09	–15.7E–6	17.3E–3	–8.1E+0
78	53.88	10.00	10.90	–15.7E–6	17.3E–3	–8.1E+0
79	50.76	10.00	11.40	–15.7E–6	17.3E–3	–8.1E+0
80	50.00	([a])	12.38	–15.7E–6	17.3E–3	–8.1E+0
81	46.83	([a])	13.02	–15.7E–6	17.3E–3	–8.1E+0
82	35.63	10.00	12.30	–15.7E–6	17.3E–3	–8.1E+0
83	32.48	10.00	10.32	–15.7E–6	17.3E–3	–8.1E+0
84	26.79	10.00	9.70	–15.7E–6	17.3E–3	–8.1E+0
85	24.94	10.00	11.05	–15.7E–6	17.3E–3	–8.1E+0
86	23.21	16.74	11.88	–15.7E–6	17.3E–3	–8.1E+0
87	24.70	3.36	12.21	–15.7E–6	17.3E–3	–8.1E+0
88	25.00	([a])	13.29	–15.7E–6	17.3E–3	–8.1E+0
89	24.47	([a])	13.73	–15.7E–6	17.3E–3	–8.1E+0
90	18.71	([a])	12.77	–15.7E–6	17.3E–3	–8.1E+0
91	10.85	([a])	11.46	–15.7E–6	17.3E–3	–8.1E+0
92	3.40	([a])	9.84	–15.7E–6	17.3E–3	–8.1E+0
93	0	0	7.62	–15.7E–6	17.3E–3	–8.1E+0
94	0	0	3.57	–15.7E–6	17.3E–3	–8.1E+0
95	0	0.91	1.33	–15.7E–6	17.3E–3	–8.1E+0
96	0	7.52	0	–15.7E–6	17.3E–3	–8.1E+0
97	0	0	0	–15.7E–6	17.3E–3	–8.1E+0
98	0	0	0	–15.7E–6	17.3E–3	–8.1E+0
99	0	0	0	–15.7E–6	17.3E–3	–8.1E+0
100	0	0	0	–5.9E–6	6.9E–3	–4.5E+0
101	0	0	0	3.8E–6	–3.6E–3	–866.9E–3
102	0	0	0	13.6E–6	–14.1E–3	2.7E+0
103	0	0	0	13.6E–6	–14.1E–3	2.7E+0
104	0	0	0	13.6E–6	–14.1E–3	2.7E+0
105	0	0	0	13.6E–6	–14.1E–3	2.7E+0
106	0	0	0	13.6E–6	–14.1E–3	2.7E+0
107	0	0	0	13.6E–6	–14.1E–3	2.7E+0
108	0	0	0	13.6E–6	–14.1E–3	2.7E+0
109	0	0	0	13.6E–6	–14.1E–3	2.7E+0
110	0	0	0	13.6E–6	–14.1E–3	2.7E+0
111	0	0	0	13.6E–6	–14.1E–3	2.7E+0
112	0	0	0	13.6E–6	–14.1E–3	2.7E+0
113	0	0	0	13.6E–6	–14.1E–3	2.7E+0
114	0	0	0	13.6E–6	–14.1E–3	2.7E+0
115	0	0	0	13.6E–6	–14.1E–3	2.7E+0
116	0	0	0	13.6E–6	–14.1E–3	2.7E+0
117	0	0	0	13.6E–6	–14.1E–3	2.7E+0
118	0	0	0	13.6E–6	–14.1E–3	2.7E+0
119	0	0	0	13.6E–6	–14.1E–3	2.7E+0
120	0	0	0	13.6E–6	–14.1E–3	2.7E+0
121	0	0	0	13.6E–6	–14.1E–3	2.7E+0
122	0	0	0	13.6E–6	–14.1E–3	2.7E+0
123	0	0	0	13.6E–6	–14.1E–3	2.7E+0
124	0	0	0	13.6E–6	–14.1E–3	2.7E+0
125	0	0	0	13.6E–6	–14.1E–3	2.7E+0
126	0	0	0	13.6E–6	–14.1E–3	2.7E+0
127	0	0	0	13.6E–6	–14.1E–3	2.7E+0
128	0	0	0	13.6E–6	–14.1E–3	2.7E+0
129	1.58	([a])	0	13.6E–6	–14.1E–3	2.7E+0
130	1.43	([a])	0	13.6E–6	–14.1E–3	2.7E+0
131	0	0	0	13.6E–6	–14.1E–3	2.7E+0
132	0	0	0	13.6E–6	–14.1E–3	2.7E+0
133	1.91	9.28	0	13.6E–6	–14.1E–3	2.7E+0
134	2.75	0	0	13.6E–6	–14.1E–3	2.7E+0
135	0	0	0	13.6E–6	–14.1E–3	2.7E+0
136	0	0	0	13.6E–6	–14.1E–3	2.7E+0
137	0	0	0	13.6E–6	–14.1E–3	2.7E+0
138	0	0	0	13.6E–6	–14.1E–3	2.7E+0
139	0	0	0	13.6E–6	–14.1E–3	2.7E+0
140	0	0	0	13.6E–6	–14.1E–3	2.7E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
141	0	0	0	13.6E–6	–14.1E–3	2.7E+0
142	0	0	0	13.6E–6	–14.1E–3	2.7E+0
143	0	0	0	13.6E–6	–14.1E–3	2.7E+0
144	0	0	0	13.6E–6	–14.1E–3	2.7E+0
145	0	0	0	13.6E–6	–14.1E–3	2.7E+0
146	0	0	0	13.6E–6	–14.1E–3	2.7E+0
147	0	5.51	0	13.6E–6	–14.1E–3	2.7E+0
148	0	11.34	0	13.6E–6	–14.1E–3	2.7E+0
149	0	0	0	13.6E–6	–14.1E–3	2.7E+0
150	0	0	0	13.6E–6	–14.1E–3	2.7E+0
151	0	0	0	13.6E–6	–14.1E–3	2.7E+0
152	0	0	0	13.6E–6	–14.1E–3	2.7E+0
153	0	0	0	13.6E–6	–14.1E–3	2.7E+0
154	0	0	0	13.6E–6	–14.1E–3	2.7E+0
155	0	0	0	13.6E–6	–14.1E–3	2.7E+0
156	0	0	0	13.6E–6	–14.1E–3	2.7E+0
157	0	0	0	13.6E–6	–14.1E–3	2.7E+0
158	0	0.21	0	13.6E–6	–14.1E–3	2.7E+0
159	0	30.00	0	13.6E–6	–14.1E–3	2.7E+0
160	0	26.78	0	13.6E–6	–14.1E–3	2.7E+0
161	0	20.00	0	13.6E–6	–14.1E–3	2.7E+0
162	0	20.00	0	13.6E–6	–14.1E–3	2.7E+0
163	0	4.12	0	13.6E–6	–14.1E–3	2.7E+0
164	0	0	0	13.6E–6	–14.1E–3	2.7E+0
165	0	0	0	13.6E–6	–14.1E–3	2.7E+0
166	0	0	0	13.6E–6	–14.1E–3	2.7E+0
167	0	0	0	13.6E–6	–14.1E–3	2.7E+0
168	0	0	0	13.6E–6	–14.1E–3	2.7E+0
169	0	0	0	13.6E–6	–14.1E–3	2.7E+0
170	0	0	0	13.6E–6	–14.1E–3	2.7E+0
171	0	0	0	13.6E–6	–14.1E–3	2.7E+0
172	0	0	0	13.6E–6	–14.1E–3	2.7E+0
173	0	0	0	13.6E–6	–14.1E–3	2.7E+0
174	0	0	0	13.6E–6	–14.1E–3	2.7E+0
175	0	0	0	13.6E–6	–14.1E–3	2.7E+0
176	0	0	0	13.6E–6	–14.1E–3	2.7E+0
177	0	0	0	13.6E–6	–14.1E–3	2.7E+0
178	0	0	0	13.6E–6	–14.1E–3	2.7E+0
179	0	0	0	13.6E–6	–14.1E–3	2.7E+0
180	0	0	0	13.6E–6	–14.1E–3	2.7E+0
181	0	0	0	13.6E–6	–14.1E–3	2.7E+0
182	0	0	0	13.6E–6	–14.1E–3	2.7E+0
183	0	0	0	13.6E–6	–14.1E–3	2.7E+0
184	0	20.00	0	13.6E–6	–14.1E–3	2.7E+0
185	0	20.00	0	13.6E–6	–14.1E–3	2.7E+0
186	0	11.73	0	13.6E–6	–14.1E–3	2.7E+0
187	0	0	0	13.6E–6	–14.1E–3	2.7E+0
188	0	0	0	13.6E–6	–14.1E–3	2.7E+0
189	0	0	0	13.6E–6	–14.1E–3	2.7E+0
190	0	0	0	13.6E–6	–14.1E–3	2.7E+0
191	0	0	0	13.6E–6	–14.1E–3	2.7E+0
192	0	0	0	13.6E–6	–14.1E–3	2.7E+0
193	0	0	0	13.6E–6	–14.1E–3	2.7E+0
194	0	0	0	13.6E–6	–14.1E–3	2.7E+0
195	0	0	0	13.6E–6	–14.1E–3	2.7E+0
196	0	0	0	13.6E–6	–14.1E–3	2.7E+0
197	0	0	0	13.6E–6	–14.1E–3	2.7E+0
198	0	0	0	13.6E–6	–14.1E–3	2.7E+0
199	0	0	0	13.6E–6	–14.1E–3	2.7E+0
200	0	0	0	13.6E–6	–14.1E–3	2.7E+0
201	0	0	0	13.6E–6	–14.1E–3	2.7E+0
202	0	0	0	13.6E–6	–14.1E–3	2.7E+0
203	0	0	0	13.6E–6	–14.1E–3	2.7E+0
204	0	0	0	13.6E–6	–14.1E–3	2.7E+0
205	0	0	0	13.6E–6	–14.1E–3	2.7E+0
206	0	0	0	13.6E–6	–14.1E–3	2.7E+0
207	0	0	0	13.6E–6	–14.1E–3	2.7E+0
208	0	0	0	13.6E–6	–14.1E–3	2.7E+0
209	0	0	0	13.6E–6	–14.1E–3	2.7E+0
210	0	0	0	13.6E–6	–14.1E–3	2.7E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
211	0	0	0	13.6E–6	–14.1E–3	2.7E+0
212	0	0	0	13.6E–6	–14.1E–3	2.7E+0
213	0	0	0	13.6E–6	–14.1E–3	2.7E+0
214	0	73.41	0	13.6E–6	–14.1E–3	2.7E+0
215	0	90.00	0	13.6E–6	–14.1E–3	2.7E+0
216	27.95	81.30	0	13.6E–6	–14.1E–3	2.7E+0
217	36.74	90.00	2.80	13.6E–6	–14.1E–3	2.7E+0
218	39.29	90.00	5.59	13.6E–6	–14.1E–3	2.7E+0
219	41.44	90.00	8.39	13.6E–6	–14.1E–3	2.7E+0
220	45.57	82.41	11.19	13.6E–6	–14.1E–3	2.7E+0
221	59.52	80.00	14.30	13.6E–6	–14.1E–3	2.7E+0
222	66.99	90.00	16.03	13.6E–6	–14.1E–3	2.7E+0
223	80.22	90.00	17.30	13.6E–6	–14.1E–3	2.7E+0
224	86.41	93.88	19.72	13.6E–6	–14.1E–3	2.7E+0
225	86.53	50.94	23.18	13.6E–6	–14.1E–3	2.7E+0
226	84.46	17.02	25.27	13.6E–6	–14.1E–3	2.7E+0
227	88.54	28.60	26.91	13.6E–6	–14.1E–3	2.7E+0
228	89.29	39.83	28.89	13.6E–6	–14.1E–3	2.7E+0
229	89.29	30.00	29.43	13.6E–6	–14.1E–3	2.7E+0
230	89.29	26.69	29.50	13.6E–6	–14.1E–3	2.7E+0
231	90.16	20.00	30.49	13.6E–6	–14.1E–3	2.7E+0
232	89.92	20.00	32.02	13.6E–6	–14.1E–3	2.7E+0
233	89.29	36.06	32.91	13.6E–6	–14.1E–3	2.7E+0
234	85.86	40.00	32.55	13.6E–6	–14.1E–3	2.7E+0
235	85.51	30.00	32.26	13.6E–6	–14.1E–3	2.7E+0
236	84.42	32.75	32.65	13.6E–6	–14.1E–3	2.7E+0
237	86.48	35.68	33.50	13.6E–6	–14.1E–3	2.7E+0
238	88.55	30.00	34.96	13.6E–6	–14.1E–3	2.7E+0
239	89.29	44.93	36.44	13.6E–6	–14.1E–3	2.7E+0
240	90.90	50.00	36.95	4.5E–6	–4.7E–3	915.7E–3
241	77.27	([a])	37.02	–4.5E–6	4.7E–3	–915.7E–3
242	56.75	([a])	36.97	–13.6E–6	14.1E–3	–2.7E+0
243	50.00	([a])	36.37	–13.6E–6	14.1E–3	–2.7E+0
244	41.07	([a])	35.56	–13.6E–6	14.1E–3	–2.7E+0
245	37.38	45.18	34.72	–13.6E–6	14.1E–3	–2.7E+0
246	34.21	78.47	33.84	–13.6E–6	14.1E–3	–2.7E+0
247	32.13	80.00	33.40	–13.6E–6	14.1E–3	–2.7E+0
248	27.71	80.00	32.93	–13.6E–6	14.1E–3	–2.7E+0
249	22.64	80.00	31.98	–13.6E–6	14.1E–3	–2.7E+0
250	20.58	60.97	30.98	–13.6E–6	14.1E–3	–2.7E+0
251	16.25	27.34	29.91	–13.6E–6	14.1E–3	–2.7E+0
252	11.46	43.71	28.73	–13.6E–6	14.1E–3	–2.7E+0
253	9.02	68.95	27.34	–13.6E–6	14.1E–3	–2.7E+0
254	3.38	68.95	25.85	–13.6E–6	14.1E–3	–2.7E+0
255	1.32	44.28	24.49	–13.6E–6	14.1E–3	–2.7E+0
256	0	0	23.19	–13.6E–6	14.1E–3	–2.7E+0
257	0	0	21.87	–13.6E–6	14.1E–3	–2.7E+0
258	0	0	17.39	–13.6E–6	14.1E–3	–2.7E+0
259	0	0	12.92	–13.6E–6	14.1E–3	–2.7E+0
260	0	0	8.45	–13.6E–6	14.1E–3	–2.7E+0
261	0	0	3.97	–13.6E–6	14.1E–3	–2.7E+0
262	0	0	0	–13.6E–6	14.1E–3	–2.7E+0
263	0	24.97	0	–13.6E–6	14.1E–3	–2.7E+0
264	0	17.16	0	–13.6E–6	14.1E–3	–2.7E+0
265	0	6.20	0	–9.1E–6	9.4E–3	–1.8E+0
266	0	10.00	0	–4.5E–6	4.7E–3	–915.7E–3
267	0	10.00	0	0	0	0
268	0	0	0	0	0	0
269	0	0	0	0	0	0
270	0	0	0	0	0	0
271	0	0	0	0	0	0
272	0	0	0	0	0	0
273	0	0	0	0	0	0
274	0	0	0	0	0	0
275	0	0	0	0	0	0
276	0	0	0	0	0	0
277	0	0	0	0	0	0
278	0	0	0	0	0	0
279	0	0	0	0	0	0
280	0	0	0	0	0	0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
281	0	0	0	0	0	0
282	0	0	0	0	0	0
283	0	0	0	0	0	0
284	0	0	0	0	0	0
285	0	0	0	0	0	0
286	0	0	0	0	0	0
287	0	0	0	0	0	0
288	0	0	0	0	0	0
289	0	0	0	0	0	0
290	0	0	0	0	0	0
291	0	0	0	0	0	0
292	0	0	0	0	0	0
293	0	0	0	0	0	0
294	0	0	0	0	0	0
295	0	0	0	0	0	0
296	0	0	0	0	0	0
297	0	0	0	0	0	0
298	0	0	0	0	0	0
299	0	0	0	0	0	0
300	0	0	0	0	0	0
301	0	0	0	0	0	0
302	0	0	0	0	0	0
303	0	0	0	0	0	0
304	0	0	0	0	0	0
305	0	0	0	0	0	0
306	0	0	0	0	0	0
307	0	0	0	0	0	0
308	0	0	0	0	0	0
309	0	0	0	0	0	0
310	0	0	0	0	0	0
311	0	0	0	0	0	0
312	0	0	0	0	0	0
313	0	0	0	0	0	0
314	0	0	0	0	0	0
315	0	0	0	0	0	0
316	0	0	0	0	0	0
317	0	0	0	0	0	0
318	0	0	0	0	0	0
319	0	0	0	0	0	0
320	0	0	0	0	0	0
321	0	15.55	0	0	0	0
322	0	20.00	0	0	0	0
323	21.59	19.08	1.20	0	0	0
324	20.54	10.00	2.18	0	0	0
325	10.32	1.86	2.88	0	0	0
326	6.13	([a])	3.00	0	0	0
327	5.36	([a])	2.28	0	0	0
328	0.64	([a])	0	0	0	0
329	0	0	0	0	0	0
330	0	0	0	0	0	0
331	0	0	0	0	0	0
332	0	0	0	0	0	0
333	0	0	0	0	0	0
334	0	0	0	0	0	0
335	0	0	0	0	0	0
336	0	0	0	0	0	0
337	0	0	0	0	0	0
338	0	0	0	0	0	0
339	0	0	0	0	0	0
340	0	0	0	0	0	0
341	0	0	0	0	0	0
342	0	0	0	0	0	0
343	0	0	0	0	0	0
344	0	0	0	0	0	0
345	0	0	0	0	0	0
346	0	0	0	0	0	0
347	0	0	0	0	0	0
348	0	0	0	0	0	0
349	0	0	0	0	0	0
350	0	0	0	0	0	0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
351	0	0	0	0	0	0
352	0	0	0	0	0	0
353	0	0	0	0	0	0
354	0	0	0	0	0	0
355	0	0	0	0	0	0
356	0	0	0	0	0	0
357	0	0	0	0	0	0
358	0	0	0	0	0	0
359	0	0	0	0	0	0
360	0	0	0	0	0	0
361	0	0	0	0	0	0
362	0	0	0	0	0	0
363	0	0	0	0	0	0
364	0	0	0	0	0	0
365	0	0	0	0	0	0
366	0	0	0	0	0	0
367	0	0	0	0	0	0
368	0	0	0	0	0	0
369	0	0	0	0	0	0
370	0	0	0	0	0	0
371	0	0	0	0	0	0
372	0	0	0	0	0	0
373	0	0	0	0	0	0
374	0	0	0	0	0	0
375	0	0	0	6.3E–6	–6.4E–3	2.0E+0
376	0	0	0	12.6E–6	–12.8E–3	3.9E+0
377	0	29.59	0	18.9E–6	–19.2E–3	5.9E+0
378	–1.34	87.46	0	18.9E–6	–19.2E–3	5.9E+0
379	7.93	100.00	1.15	18.9E–6	–19.2E–3	5.9E+0
380	41.11	100.00	3.82	18.9E–6	–19.2E–3	5.9E+0
381	68.65	100.00	6.11	18.9E–6	–19.2E–3	5.9E+0
382	71.43	100.00	10.00	18.9E–6	–19.2E–3	5.9E+0
383	73.34	94.64	14.52	18.9E–6	–19.2E–3	5.9E+0
384	76.24	83.07	18.09	18.9E–6	–19.2E–3	5.9E+0
385	78.30	88.51	20.64	18.9E–6	–19.2E–3	5.9E+0
386	82.14	79.83	22.36	18.9E–6	–19.2E–3	5.9E+0
387	82.14	61.66	23.70	18.9E–6	–19.2E–3	5.9E+0
388	84.45	66.77	24.80	18.9E–6	–19.2E–3	5.9E+0
389	91.86	60.00	25.26	18.9E–6	–19.2E–3	5.9E+0
390	94.64	72.76	25.44	18.9E–6	–19.2E–3	5.9E+0
391	97.48	8.43	25.57	18.9E–6	–19.2E–3	5.9E+0
392	99.92	([a])	25.79	18.9E–6	–19.2E–3	5.9E+0
393	73.21	([a])	25.80	18.9E–6	–19.2E–3	5.9E+0
394	70.83	([a])	24.98	18.9E–6	–19.2E–3	5.9E+0
395	63.53	([a])	23.70	18.9E–6	–19.2E–3	5.9E+0
396	61.46	([a])	22.23	18.9E–6	–19.2E–3	5.9E+0
397	69.96	49.17	20.51	18.9E–6	–19.2E–3	5.9E+0
398	73.21	70.00	18.44	18.9E–6	–19.2E–3	5.9E+0
399	72.01	69.46	18.19	18.9E–6	–19.2E–3	5.9E+0
400	82.90	60.00	21.27	18.9E–6	–19.2E–3	5.9E+0
401	87.04	60.00	23.53	18.9E–6	–19.2E–3	5.9E+0
402	88.35	60.00	23.88	18.9E–6	–19.2E–3	5.9E+0
403	89.95	60.00	24.03	18.9E–6	–19.2E–3	5.9E+0
404	92.57	43.17	24.17	18.9E–6	–19.2E–3	5.9E+0
405	92.86	10.04	24.30	12.6E–6	–12.8E–3	3.9E+0
406	71.98	20.00	24.09	6.3E–6	–6.4E–3	2.0E+0
407	74.44	20.00	24.97	0	0	0
408	72.38	15.29	25.32	0	0	0
409	71.43	10.00	24.15	0	0	0
410	68.63	([a])	23.14	0	0	0
411	66.17	([a])	22.38	0	0	0
412	63.93	([a])	21.58	0	0	0
413	63.02	([a])	20.06	0	0	0
414	69.64	([a])	18.29	0	0	0
415	71.69	1.45	16.16	0	0	0
416	71.91	17.30	13.44	0	0	0
417	69.85	11.13	11.00	0	0	0
418	70.04	19.55	10.13	1.0E–6	–1.4E–3	–705.8E–3
419	75.32	24.16	11.50	2.1E–6	–2.9E–3	–1.4E+0
420	64.43	80.00	13.65	3.1E–6	–4.3E–3	–2.1E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
421	70.63	74.83	15.03	3.1E–6	–4.3E–3	–2.1E+0
422	80.44	16.04	17.50	3.1E–6	–4.3E–3	–2.1E+0
423	66.11	(a)	20.79	3.1E–6	–4.3E–3	–2.1E+0
424	60.73	(a)	22.92	3.1E–6	–4.3E–3	–2.1E+0
425	61.19	(a)	23.23	3.1E–6	–4.3E–3	–2.1E+0
426	53.03	(a)	22.42	3.1E–6	–4.3E–3	–2.1E+0
427	56.73	(a)	21.51	3.1E–6	–4.3E–3	–2.1E+0
428	62.50	2.38	20.46	3.1E–6	–4.3E–3	–2.1E+0
429	65.27	17.76	19.25	3.1E–6	–4.3E–3	–2.1E+0
430	64.40	(a)	19.61	3.1E–6	–4.3E–3	–2.1E+0
431	60.06	(a)	21.94	3.1E–6	–4.3E–3	–2.1E+0
432	32.17	(a)	22.99	3.1E–6	–4.3E–3	–2.1E+0
433	18.53	(a)	22.51	3.1E–6	–4.3E–3	–2.1E+0
434	10.26	(a)	21.98	3.1E–6	–4.3E–3	–2.1E+0
435	–1.87	0.0	21.39	3.1E–6	–4.3E–3	–2.1E+0
436	–0.65	0.0	20.73	3.1E–6	–4.3E–3	–2.1E+0
437	7.65	60.00	20.38	3.1E–6	–4.3E–3	–2.1E+0
438	27.28	61.93	20.38	3.1E–6	–4.3E–3	–2.1E+0
439	59.91	63.00	20.78	3.1E–6	–4.3E–3	–2.1E+0
440	76.81	39.85	21.84	3.1E–6	–4.3E–3	–2.1E+0
441	79.76	30.00	23.60	3.1E–6	–4.3E–3	–2.1E+0
442	81.82	30.00	25.31	3.1E–6	–4.3E–3	–2.1E+0
443	87.39	10.40	26.41	3.1E–6	–4.3E–3	–2.1E+0
444	87.26	1.37	27.29	3.1E–6	–4.3E–3	–2.1E+0
445	85.71	10.00	27.97	3.1E–6	–4.3E–3	–2.1E+0
446	85.71	0.96	28.20	3.1E–6	–4.3E–3	–2.1E+0
447	85.71	(a)	28.31	3.1E–6	–4.3E–3	–2.1E+0
448	76.13	28.34	29.22	3.1E–6	–4.3E–3	–2.1E+0
449	78.16	30.76	29.63	3.1E–6	–4.3E–3	–2.1E+0
450	76.93	29.18	29.64	3.1E–6	–4.3E–3	–2.1E+0
451	78.57	20.00	30.67	3.1E–6	–4.3E–3	–2.1E+0
452	77.87	20.00	32.17	3.1E–6	–4.3E–3	–2.1E+0
453	76.79	20.00	33.10	3.1E–6	–4.3E–3	–2.1E+0
454	78.05	20.00	33.30	3.1E–6	–4.3E–3	–2.1E+0
455	78.57	11.32	33.15	3.1E–6	–4.3E–3	–2.1E+0
456	69.50	(a)	32.66	3.1E–6	–4.3E–3	–2.1E+0
457	64.29	(a)	31.98	3.1E–6	–4.3E–3	–2.1E+0
458	63.68	(a)	31.48	3.1E–6	–4.3E–3	–2.1E+0
459	62.50	0.04	31.39	3.1E–6	–4.3E–3	–2.1E+0
460	62.50	(a)	31.30	3.1E–6	–4.3E–3	–2.1E+0
461	66.86	(a)	32.20	3.1E–6	–4.3E–3	–2.1E+0
462	66.13	(a)	33.13	3.1E–6	–4.3E–3	–2.1E+0
463	60.48	(a)	33.13	3.1E–6	–4.3E–3	–2.1E+0
464	58.93	(a)	33.14	3.1E–6	–4.3E–3	–2.1E+0
465	57.35	(a)	33.14	3.1E–6	–4.3E–3	–2.1E+0
466	55.36	(a)	33.15	3.1E–6	–4.3E–3	–2.1E+0
467	49.95	(a)	33.16	3.1E–6	–4.3E–3	–2.1E+0
468	48.21	(a)	33.16	3.1E–6	–4.3E–3	–2.1E+0
469	59.31	(a)	33.17	2.1E–6	–3.2E–3	–2.2E+0
470	67.15	70.00	33.30	1.0E–6	–2.1E–3	–2.3E+0
471	76.79	54.53	33.56	–53.4E–9	–1.0E–3	–2.4E+0
472	76.79	24.56	35.59	–53.4E–9	–1.0E–3	–2.4E+0
473	79.29	(a)	39.04	–53.4E–9	–1.0E–3	–2.4E+0
474	80.36	(a)	41.83	–53.4E–9	–1.0E–3	–2.4E+0
475	94.18	(a)	43.06	–53.4E–9	–1.0E–3	–2.4E+0
476	66.07	(a)	43.13	–53.4E–9	–1.0E–3	–2.4E+0
477	65.48	(a)	43.21	–53.4E–9	–1.0E–3	–2.4E+0
478	63.41	10.00	43.29	–53.4E–9	–1.0E–3	–2.4E+0
479	68.27	29.38	43.37	–53.4E–9	–1.0E–3	–2.4E+0
480	72.87	40.00	44.00	–53.4E–9	–1.0E–3	–2.4E+0
481	69.79	30.39	45.13	–53.4E–9	–1.0E–3	–2.4E+0
482	66.19	26.46	47.02	–53.4E–9	–1.0E–3	–2.4E+0
483	80.36	0.0	49.20	–53.4E–9	–1.0E–3	–2.4E+0
484	81.13	0.0	49.92	–53.4E–9	–1.0E–3	–2.4E+0
485	82.14	(a)	50.36	–53.4E–9	–1.0E–3	–2.4E+0
486	83.48	(a)	51.52	–53.4E–9	–1.0E–3	–2.4E+0
487	83.93	(a)	52.11	–53.4E–9	–1.0E–3	–2.4E+0
488	84.04	(a)	52.12	–53.4E–9	–1.0E–3	–2.4E+0
489	79.43	(a)	52.14	–53.4E–9	–1.0E–3	–2.4E+0
490	56.47	(a)	52.16	–53.4E–9	–1.0E–3	–2.4E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
491	55.36	([a])	52.18	–53.4E–9	–1.0E–3	–2.4E+0
492	44.23	45.37	52.20	–53.4E–9	–1.0E–3	–2.4E+0
493	46.87	86.99	52.22	–53.4E–9	–1.0E–3	–2.4E+0
494	57.14	90.00	52.16	–53.4E–9	–1.0E–3	–2.4E+0
495	58.03	90.00	52.53	–53.4E–9	–1.0E–3	–2.4E+0
496	64.22	93.22	52.98	–53.4E–9	–1.0E–3	–2.4E+0
497	70.42	95.21	53.65	–53.4E–9	–1.0E–3	–2.4E+0
498	73.21	83.64	54.77	–53.4E–9	–1.0E–3	–2.4E+0
499	77.46	80.00	55.14	–53.4E–9	–1.0E–3	–2.4E+0
500	83.67	80.00	54.57	–53.4E–9	–1.0E–3	–2.4E+0
501	84.71	80.00	53.63	–53.4E–9	–1.0E–3	–2.4E+0
502	92.50	80.00	52.70	–53.4E–9	–1.0E–3	–2.4E+0
503	90.38	41.89	52.03	–53.4E–9	–1.0E–3	–2.4E+0
504	85.25	24.85	51.66	–53.4E–9	–1.0E–3	–2.4E+0
505	87.50	50.00	51.42	–53.4E–9	–1.0E–3	–2.4E+0
506	89.10	50.00	51.28	–53.4E–9	–1.0E–3	–2.4E+0
507	94.83	46.82	51.13	–53.4E–9	–1.0E–3	–2.4E+0
508	98.96	([a])	51.53	–53.4E–9	–1.0E–3	–2.4E+0
509	87.99	([a])	52.04	–17.8E–9	–339.7E–6	–805.1E–3
510	63.35	([a])	51.32	17.8E–9	339.7E–6	805.1E–3
511	60.06	([a])	49.20	53.4E–9	1.0E–3	2.4E+0
512	54.43	([a])	46.43	53.4E–9	1.0E–3	2.4E+0
513	42.88	([a])	43.58	53.4E–9	1.0E–3	2.4E+0
514	46.71	([a])	40.65	53.4E–9	1.0E–3	2.4E+0
515	48.21	([a])	37.62	53.4E–9	1.0E–3	2.4E+0
516	58.28	([a])	34.62	53.4E–9	1.0E–3	2.4E+0
517	69.64	([a])	31.62	53.4E–9	1.0E–3	2.4E+0
518	51.44	([a])	28.44	53.4E–9	1.0E–3	2.4E+0
519	38.02	([a])	25.01	53.4E–9	1.0E–3	2.4E+0
520	34.65	([a])	21.38	53.4E–9	1.0E–3	2.4E+0
521	19.97	([a])	17.39	53.4E–9	1.0E–3	2.4E+0
522	3.14	([a])	12.76	53.4E–9	1.0E–3	2.4E+0
523	0	0	6.14	53.4E–9	1.0E–3	2.4E+0
524	–1.30	36.39	0	53.4E–9	1.0E–3	2.4E+0
525	–0.21	5.75	0	53.4E–9	1.0E–3	2.4E+0
526	0	0	0	53.4E–9	1.0E–3	2.4E+0
527	0	0	0	53.4E–9	1.0E–3	2.4E+0
528	0	0	0	53.4E–9	1.0E–3	2.4E+0
529	0	0	0	53.4E–9	1.0E–3	2.4E+0
530	0	0	0	5.3E–6	–4.8E–3	1.4E+0
531	0	0	0	10.6E–6	–10.5E–3	287.6E–3
532	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
533	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
534	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
535	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
536	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
537	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
538	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
539	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
540	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
541	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
542	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
543	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
544	0	([a])	0	15.9E–6	–16.3E–3	–776.2E–3
545	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
546	–0.67	0	0	15.9E–6	–16.3E–3	–776.2E–3
547	–0.50	0	0	15.9E–6	–16.3E–3	–776.2E–3
548	3.57	([a])	0	15.9E–6	–16.3E–3	–776.2E–3
549	0.61	([a])	0	15.9E–6	–16.3E–3	–776.2E–3
550	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
551	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
552	0	2.60	0	15.9E–6	–16.3E–3	–776.2E–3
553	0	20.00	0	15.9E–6	–16.3E–3	–776.2E–3
554	0	20.00	0	15.9E–6	–16.3E–3	–776.2E–3
555	0	7.96	0	15.9E–6	–16.3E–3	–776.2E–3
556	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
557	0	0	0	15.9E–6	–16.3E–3	–776.2E–3
558	0	78.53	0	15.9E–6	–16.3E–3	–776.2E–3
559	1.65	60.00	0	15.9E–6	–16.3E–3	–776.2E–3
560	9.91	63.88	2.80	15.9E–6	–16.3E–3	–776.2E–3

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
561	14.29	70.00	6.02	15.9E–6	–16.3E–3	–776.2E–3
562	26.83	70.00	8.57	15.9E–6	–16.3E–3	–776.2E–3
563	38.29	70.00	11.07	15.9E–6	–16.3E–3	–776.2E–3
564	50.09	70.00	13.68	15.9E–6	–16.3E–3	–776.2E–3
565	56.60	66.52	16.52	15.9E–6	–16.3E–3	–776.2E–3
566	63.09	59.94	19.38	15.9E–6	–16.3E–3	–776.2E–3
567	65.16	80.00	21.91	15.9E–6	–16.3E–3	–776.2E–3
568	69.53	86.46	24.34	15.9E–6	–16.3E–3	–776.2E–3
569	78.60	90.00	27.02	15.9E–6	–16.3E–3	–776.2E–3
570	80.36	90.00	29.41	15.9E–6	–16.3E–3	–776.2E–3
571	82.35	100.00	31.57	15.9E–6	–16.3E–3	–776.2E–3
572	83.93	100.00	33.52	15.9E–6	–16.3E–3	–776.2E–3
573	84.70	100.00	35.75	15.9E–6	–16.3E–3	–776.2E–3
574	85.71	100.00	38.34	15.9E–6	–16.3E–3	–776.2E–3
575	87.04	100.00	40.83	15.9E–6	–16.3E–3	–776.2E–3
576	97.18	100.00	43.37	15.9E–6	–16.3E–3	–776.2E–3
577	98.21	83.92	44.90	15.9E–6	–16.3E–3	–776.2E–3
578	93.54	([a])	45.32	5.3E–6	–5.4E–3	–258.7E–3
579	78.13	([a])	45.25	–5.3E–6	5.4E–3	258.7E–3
580	80.36	0	44.24	–15.9E–6	16.3E–3	776.2E–3
581	81.59	([a])	42.61	–15.9E–6	16.3E–3	776.2E–3
582	73.07	([a])	40.93	–15.9E–6	16.3E–3	776.2E–3
583	58.92	([a])	39.03	–15.9E–6	16.3E–3	776.2E–3
584	56.86	([a])	36.96	–15.9E–6	16.3E–3	776.2E–3
585	54.22	([a])	34.84	–15.9E–6	16.3E–3	776.2E–3
586	50.94	([a])	32.66	–15.9E–6	16.3E–3	776.2E–3
587	47.74	([a])	30.40	–15.9E–6	16.3E–3	776.2E–3
588	45.02	([a])	28.04	–15.9E–6	16.3E–3	776.2E–3
589	39.56	([a])	25.57	–15.9E–6	16.3E–3	776.2E–3
590	33.55	37.91	22.94	–15.9E–6	16.3E–3	776.2E–3
591	29.89	20.00	20.11	–15.9E–6	16.3E–3	776.2E–3
592	27.82	20.00	18.17	–15.9E–6	16.3E–3	776.2E–3
593	25.76	20.00	17.20	–15.9E–6	16.3E–3	776.2E–3
594	19.76	20.00	16.06	–15.9E–6	16.3E–3	776.2E–3
595	8.31	([a])	14.93	–15.9E–6	16.3E–3	776.2E–3
596	0	0	13.78	–15.9E–6	16.3E–3	776.2E–3
597	0	0	10.72	–15.9E–6	16.3E–3	776.2E–3
598	0	0	6.24	–15.9E–6	16.3E–3	776.2E–3
599	0	0	1.77	–15.9E–6	16.3E–3	776.2E–3
600	0	0	0	–15.9E–6	16.3E–3	776.2E–3
601	0	0	0	–15.9E–6	16.3E–3	776.2E–3
602	0	0	0	–15.9E–6	16.3E–3	776.2E–3
603	0	0	0	–15.9E–6	16.3E–3	776.2E–3
604	0	0	0	–15.9E–6	16.3E–3	776.2E–3
605	0	0	0	–15.9E–6	16.3E–3	776.2E–3
606	2.25	6.30	0	–15.9E–6	16.3E–3	776.2E–3
607	9.20	17.87	0	–7.1E–6	7.2E–3	1.5E+0
608	12.40	20.00	0.75	1.8E–6	–1.9E–3	2.1E+0
609	18.04	20.00	1.90	10.7E–6	–11.0E–3	2.8E+0
610	21.49	22.59	3.81	10.7E–6	–11.0E–3	2.8E+0
611	29.76	17.50	5.91	10.7E–6	–11.0E–3	2.8E+0
612	35.98	([a])	7.92	10.7E–6	–11.0E–3	2.8E+0
613	42.72	([a])	9.86	10.7E–6	–11.0E–3	2.8E+0
614	58.93	7.78	9.37	10.7E–6	–11.0E–3	2.8E+0
615	60.71	10.93	5.32	10.7E–6	–11.0E–3	2.8E+0
616	60.35	32.04	1.45	10.7E–6	–11.0E–3	2.8E+0
617	58.93	40.00	4.28	10.7E–6	–11.0E–3	2.8E+0
618	59.86	40.00	6.78	10.7E–6	–11.0E–3	2.8E+0
619	60.71	40.00	9.12	10.7E–6	–11.0E–3	2.8E+0
620	60.71	48.33	11.69	10.7E–6	–11.0E–3	2.8E+0
621	67.79	99.53	14.17	10.7E–6	–11.0E–3	2.8E+0
622	69.64	100.00	16.35	10.7E–6	–11.0E–3	2.8E+0
623	69.64	100.00	19.18	10.7E–6	–11.0E–3	2.8E+0
624	68.81	100.00	22.35	10.7E–6	–11.0E–3	2.8E+0
625	67.86	100.00	25.17	10.7E–6	–11.0E–3	2.8E+0
626	67.86	100.00	27.60	10.7E–6	–11.0E–3	2.8E+0
627	67.86	100.00	29.72	10.7E–6	–11.0E–3	2.8E+0
628	67.53	100.00	31.71	10.7E–6	–11.0E–3	2.8E+0
629	65.18	97.50	33.60	10.7E–6	–11.0E–3	2.8E+0
630	68.58	90.00	35.39	10.7E–6	–11.0E–3	2.8E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
631	71.66	90.00	37.08	10.7E–6	–11.0E–3	2.8E+0
632	74.50	90.00	38.83	10.7E–6	–11.0E–3	2.8E+0
633	75.00	98.79	40.28	10.7E–6	–11.0E–3	2.8E+0
634	75.00	100.00	41.29	10.7E–6	–11.0E–3	2.8E+0
635	74.65	100.00	42.31	10.7E–6	–11.0E–3	2.8E+0
636	73.21	100.00	42.90	10.7E–6	–11.0E–3	2.8E+0
637	74.13	94.91	42.94	10.7E–6	–11.0E–3	2.8E+0
638	77.38	90.00	42.83	10.7E–6	–11.0E–3	2.8E+0
639	80.04	90.00	42.74	10.7E–6	–11.0E–3	2.8E+0
640	80.36	99.81	42.65	10.7E–6	–11.0E–3	2.8E+0
641	79.87	100.00	42.56	10.7E–6	–11.0E–3	2.8E+0
642	76.79	100.00	42.88	10.7E–6	–11.0E–3	2.8E+0
643	76.79	95.47	43.29	10.7E–6	–11.0E–3	2.8E+0
644	77.88	90.00	43.30	10.7E–6	–11.0E–3	2.8E+0
645	78.57	90.00	43.37	10.7E–6	–11.0E–3	2.8E+0
646	78.57	80.74	43.79	10.7E–6	–11.0E–3	2.8E+0
647	78.57	79.17	44.07	10.7E–6	–11.0E–3	2.8E+0
648	78.57	77.21	44.01	10.7E–6	–11.0E–3	2.8E+0
649	78.57	100.00	44.41	6.8E–6	–7.3E–3	2.3E+0
650	78.57	94.45	44.85	2.9E–6	–3.6E–3	1.7E+0
651	78.57	90.00	44.83	–935.4E–9	141.2E–6	1.1E+0
652	78.57	90.00	44.78	–935.4E–9	141.2E–6	1.1E+0
653	80.36	90.00	45.00	–935.4E–9	141.2E–6	1.1E+0
654	80.03	90.00	45.80	–935.4E–9	141.2E–6	1.1E+0
655	79.18	90.00	46.46	–935.4E–9	141.2E–6	1.1E+0
656	80.36	90.00	46.54	–935.4E–9	141.2E–6	1.1E+0
657	80.36	90.00	46.12	–935.4E–9	141.2E–6	1.1E+0
658	81.81	81.86	45.94	–935.4E–9	141.2E–6	1.1E+0
659	82.14	80.00	45.81	–935.4E–9	141.2E–6	1.1E+0
660	80.36	81.29	45.45	–935.4E–9	141.2E–6	1.1E+0
661	79.85	92.86	45.81	–935.4E–9	141.2E–6	1.1E+0
662	77.78	100.00	46.26	–935.4E–9	141.2E–6	1.1E+0
663	76.79	100.00	46.32	–935.4E–9	141.2E–6	1.1E+0
664	76.79	100.00	46.28	–935.4E–9	141.2E–6	1.1E+0
665	80.05	100.00	46.46	–935.4E–9	141.2E–6	1.1E+0
666	80.36	99.27	46.92	–935.4E–9	141.2E–6	1.1E+0
667	80.77	90.00	47.16	–935.4E–9	141.2E–6	1.1E+0
668	82.84	90.00	47.58	–935.4E–9	141.2E–6	1.1E+0
669	84.90	90.00	48.04	–935.4E–9	141.2E–6	1.1E+0
670	89.48	82.97	48.05	–935.4E–9	141.2E–6	1.1E+0
671	91.07	80.00	48.02	–935.4E–9	141.2E–6	1.1E+0
672	91.07	70.18	48.00	–935.4E–9	141.2E–6	1.1E+0
673	91.07	80.00	47.97	–935.4E–9	141.2E–6	1.1E+0
674	86.91	50.07	47.95	–935.4E–9	141.2E–6	1.1E+0
675	77.70	([a])	47.95	–935.4E–9	141.2E–6	1.1E+0
676	76.79	([a])	48.86	–935.4E–9	141.2E–6	1.1E+0
677	65.29	22.19	49.92	–935.4E–9	141.2E–6	1.1E+0
678	67.65	39.62	50.26	–935.4E–9	141.2E–6	1.1E+0
679	67.64	48.80	50.18	–935.4E–9	141.2E–6	1.1E+0
680	67.06	37.23	49.91	–935.4E–9	141.2E–6	1.1E+0
681	69.64	34.34	49.90	–935.4E–9	141.2E–6	1.1E+0
682	71.76	40.00	49.88	–935.4E–9	141.2E–6	1.1E+0
683	69.21	47.49	49.87	–935.4E–9	141.2E–6	1.1E+0
684	72.71	50.00	49.86	–935.4E–9	141.2E–6	1.1E+0
685	73.33	39.36	49.85	–935.4E–9	141.2E–6	1.1E+0
686	75.00	27.79	49.83	–935.4E–9	141.2E–6	1.1E+0
687	75.00	16.21	49.82	–935.4E–9	141.2E–6	1.1E+0
688	75.00	15.36	49.67	–935.4E–9	141.2E–6	1.1E+0
689	76.24	26.93	49.60	–935.4E–9	141.2E–6	1.1E+0
690	76.79	30.00	50.23	–935.4E–9	141.2E–6	1.1E+0
691	76.79	30.08	50.78	–935.4E–9	141.2E–6	1.1E+0
692	76.49	40.00	50.77	–935.4E–9	141.2E–6	1.1E+0
693	75.58	40.00	50.76	–935.4E–9	141.2E–6	1.1E+0
694	76.79	35.20	50.64	–935.4E–9	141.2E–6	1.1E+0
695	77.93	30.00	50.14	–935.4E–9	141.2E–6	1.1E+0
696	78.57	22.05	49.74	–935.4E–9	141.2E–6	1.1E+0
697	76.87	([a])	50.07	–935.4E–9	141.2E–6	1.1E+0
698	74.80	([a])	50.56	–935.4E–9	141.2E–6	1.1E+0
699	72.74	([a])	50.73	–2.8E–6	2.0E–3	303.9E–3
700	72.95	([a])	50.76	–4.7E–6	3.9E–3	–541.4E–3

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
701	76.04	([a])	50.79	–6.6E–6	5.7E–3	–1.4E+0
702	75.46	([a])	50.82	–6.6E–6	5.7E–3	–1.4E+0
703	73.40	([a])	50.85	–6.6E–6	5.7E–3	–1.4E+0
704	71.33	([a])	50.88	–6.6E–6	5.7E–3	–1.4E+0
705	69.27	([a])	50.91	–6.6E–6	5.7E–3	–1.4E+0
706	67.86	6.31	50.94	–6.6E–6	5.7E–3	–1.4E+0
707	70.68	0	50.98	–6.6E–6	5.7E–3	–1.4E+0
708	67.11	27.36	51.00	–6.6E–6	5.7E–3	–1.4E+0
709	64.29	40.00	51.03	–6.6E–6	5.7E–3	–1.4E+0
710	64.29	40.00	51.04	–6.6E–6	5.7E–3	–1.4E+0
711	66.07	38.44	51.05	–6.6E–6	5.7E–3	–1.4E+0
712	66.07	30.00	51.19	–6.6E–6	5.7E–3	–1.4E+0
713	66.07	30.00	51.69	–6.6E–6	5.7E–3	–1.4E+0
714	66.07	36.28	52.35	–6.6E–6	5.7E–3	–1.4E+0
715	64.67	47.86	52.85	–6.6E–6	5.7E–3	–1.4E+0
716	60.92	59.43	53.06	–6.6E–6	5.7E–3	–1.4E+0
717	65.89	50.00	53.07	–6.6E–6	5.7E–3	–1.4E+0
718	64.75	50.00	53.06	–6.6E–6	5.7E–3	–1.4E+0
719	66.07	45.85	53.06	–6.6E–6	5.7E–3	–1.4E+0
720	65.04	57.18	53.05	–6.6E–6	5.7E–3	–1.4E+0
721	68.20	62.70	53.05	–6.6E–6	5.7E–3	–1.4E+0
722	72.81	60.00	53.05	–6.6E–6	5.7E–3	–1.4E+0
723	71.59	60.00	53.04	–6.6E–6	5.7E–3	–1.4E+0
724	74.64	60.00	53.03	–5.4E–6	4.6E–3	–717.8E–3
725	74.50	56.40	53.02	–4.2E–6	3.4E–3	–48.8E–3
726	76.79	50.00	53.24	–3.0E–6	2.2E–3	620.2E–3
727	77.99	50.00	53.73	–3.0E–6	2.2E–3	620.2E–3
728	77.09	50.00	53.98	–3.0E–6	2.2E–3	620.2E–3
729	76.79	40.11	53.98	–3.0E–6	2.2E–3	620.2E–3
730	78.83	61.47	53.98	–3.0E–6	2.2E–3	620.2E–3
731	79.27	63.92	53.98	–3.0E–6	2.2E–3	620.2E–3
732	77.61	50.00	53.97	–3.0E–6	2.2E–3	620.2E–3
733	77.46	50.00	53.95	–3.0E–6	2.2E–3	620.2E–3
734	78.17	42.24	53.95	–3.0E–6	2.2E–3	620.2E–3
735	78.57	49.34	53.94	–3.0E–6	2.2E–3	620.2E–3
736	76.79	50.91	53.94	–3.0E–6	2.2E–3	620.2E–3
737	76.79	67.45	53.94	–3.0E–6	2.2E–3	620.2E–3
738	76.79	81.88	54.15	–3.0E–6	2.2E–3	620.2E–3
739	77.79	70.00	54.65	–3.0E–6	2.2E–3	620.2E–3
740	79.86	77.21	54.92	–3.0E–6	2.2E–3	620.2E–3
741	81.93	88.78	54.90	–3.0E–6	2.2E–3	620.2E–3
742	80.42	89.65	54.89	–3.0E–6	2.2E–3	620.2E–3
743	82.14	80.00	54.97	–3.0E–6	2.2E–3	620.2E–3
744	82.77	80.00	55.44	–3.0E–6	2.2E–3	620.2E–3
745	83.93	80.00	55.82	–3.0E–6	2.2E–3	620.2E–3
746	83.93	80.00	55.80	–3.0E–6	2.2E–3	620.2E–3
747	83.93	80.00	55.79	–3.0E–6	2.2E–3	620.2E–3
748	83.93	80.00	55.78	–3.0E–6	2.2E–3	620.2E–3
749	83.93	81.37	55.76	–4.7E–6	3.8E–3	–175.5E–3
750	84.46	87.05	55.75	–6.4E–6	5.4E–3	–971.1E–3
751	85.71	57.40	55.74	–8.0E–6	7.0E–3	–1.8E+0
752	85.71	42.19	55.42	–8.0E–6	7.0E–3	–1.8E+0
753	85.71	42.33	54.91	–8.0E–6	7.0E–3	–1.8E+0
754	85.71	40.00	55.19	–8.0E–6	7.0E–3	–1.8E+0
755	85.71	38.37	55.64	–8.0E–6	7.0E–3	–1.8E+0
756	85.71	12.83	55.31	–8.0E–6	7.0E–3	–1.8E+0
757	85.71	([a])	55.36	–8.0E–6	7.0E–3	–1.8E+0
758	85.71	([a])	55.75	–8.0E–6	7.0E–3	–1.8E+0
759	85.71	([a])	55.78	–8.0E–6	7.0E–3	–1.8E+0
760	87.27	7.37	55.81	–8.0E–6	7.0E–3	–1.8E+0
761	89.33	19.74	55.85	–8.0E–6	7.0E–3	–1.8E+0
762	91.07	11.83	55.86	–8.0E–6	7.0E–3	–1.8E+0
763	91.07	26.81	55.84	–8.0E–6	7.0E–3	–1.8E+0
764	91.96	49.96	55.81	–8.0E–6	7.0E–3	–1.8E+0
765	92.86	60.00	55.78	–8.0E–6	7.0E–3	–1.8E+0
766	91.40	60.00	55.74	–8.0E–6	7.0E–3	–1.8E+0
767	92.80	60.00	56.19	–8.0E–6	7.0E–3	–1.8E+0
768	92.86	40.00	57.13	–8.0E–6	7.0E–3	–1.8E+0
769	92.86	25.75	57.59	–8.0E–6	7.0E–3	–1.8E+0
770	92.07	([a])	57.55	–8.0E–6	7.0E–3	–1.8E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
771	90.00	([a])	57.52	–8.0E–6	7.0E–3	–1.8E+0
772	89.29	([a])	57.53	–8.0E–6	7.0E–3	–1.8E+0
773	90.92	44.88	57.58	–8.0E–6	7.0E–3	–1.8E+0
774	91.07	36.40	57.63	–8.3E–6	7.3E–3	–1.8E+0
775	91.07	([a])	57.64	–8.5E–6	7.6E–3	–1.8E+0
776	91.07	([a])	58.11	–8.8E–6	7.8E–3	–1.8E+0
777	90.10	([a])	58.52	–8.8E–6	7.8E–3	–1.8E+0
778	90.54	([a])	58.38	–8.8E–6	7.8E–3	–1.8E+0
779	89.54	([a])	58.24	–8.8E–6	7.8E–3	–1.8E+0
780	87.47	([a])	58.10	–8.8E–6	7.8E–3	–1.8E+0
781	85.71	([a])	57.96	–8.8E–6	7.8E–3	–1.8E+0
782	85.71	10.00	57.81	–8.8E–6	7.8E–3	–1.8E+0
783	85.71	0.23	57.67	–8.8E–6	7.8E–3	–1.8E+0
784	85.71	([a])	57.66	–8.8E–6	7.8E–3	–1.8E+0
785	85.71	([a])	57.89	–8.8E–6	7.8E–3	–1.8E+0
786	84.00	([a])	58.03	–8.8E–6	7.8E–3	–1.8E+0
787	69.64	([a])	57.99	–8.8E–6	7.8E–3	–1.8E+0
788	69.15	([a])	57.96	–8.8E–6	7.8E–3	–1.8E+0
789	63.99	28.96	57.93	–8.8E–6	7.8E–3	–1.8E+0
790	59.98	80.00	57.89	–8.8E–6	7.8E–3	–1.8E+0
791	59.38	87.48	57.85	–8.8E–6	7.8E–3	–1.8E+0
792	63.78	90.00	57.80	–8.8E–6	7.8E–3	–1.8E+0
793	66.19	90.00	57.72	–8.8E–6	7.8E–3	–1.8E+0
794	67.46	92.20	57.65	–8.8E–6	7.8E–3	–1.8E+0
795	66.74	100.00	57.57	–8.8E–6	7.8E–3	–1.8E+0
796	68.81	94.65	57.50	–8.8E–6	7.8E–3	–1.8E+0
797	70.88	83.08	57.80	–8.8E–6	7.8E–3	–1.8E+0
798	71.43	71.51	58.72	–8.8E–6	7.8E–3	–1.8E+0
799	71.44	69.93	59.25	–7.5E–6	6.5E–3	–1.0E+0
800	73.51	58.36	59.19	–6.2E–6	5.2E–3	–220.9E–3
801	75.00	50.00	59.16	–4.9E–6	3.9E–3	572.0E–3
802	75.00	59.58	59.15	–4.9E–6	3.9E–3	572.0E–3
803	75.00	76.36	59.15	–4.9E–6	3.9E–3	572.0E–3
804	75.00	80.00	59.14	–4.9E–6	3.9E–3	572.0E–3
805	75.00	70.49	59.14	–4.9E–6	3.9E–3	572.0E–3
806	73.21	80.00	59.62	–4.9E–6	3.9E–3	572.0E–3
807	72.74	82.66	59.93	–4.9E–6	3.9E–3	572.0E–3
808	71.43	90.00	59.42	–4.9E–6	3.9E–3	572.0E–3
809	69.36	90.00	59.07	–4.9E–6	3.9E–3	572.0E–3
810	66.54	75.24	59.05	–4.9E–6	3.9E–3	572.0E–3
811	69.27	78.96	59.03	–4.9E–6	3.9E–3	572.0E–3
812	73.12	80.00	59.02	–4.9E–6	3.9E–3	572.0E–3
813	71.80	80.00	59.00	–4.9E–6	3.9E–3	572.0E–3
814	73.21	83.68	58.99	–4.9E–6	3.9E–3	572.0E–3
815	74.15	79.50	58.97	–4.9E–6	3.9E–3	572.0E–3
816	75.00	70.00	58.96	–4.9E–6	3.9E–3	572.0E–3
817	75.00	61.60	58.95	–4.9E–6	3.9E–3	572.0E–3
818	75.00	50.03	58.94	–4.9E–6	3.9E–3	572.0E–3
819	76.79	60.00	58.93	–4.9E–6	3.9E–3	572.0E–3
820	76.79	60.00	58.93	–4.9E–6	3.9E–3	572.0E–3
821	76.79	69.39	59.38	–4.9E–6	3.9E–3	572.0E–3
822	79.03	73.73	59.87	–4.9E–6	3.9E–3	572.0E–3
823	78.96	70.00	59.91	–4.9E–6	3.9E–3	572.0E–3
824	78.57	70.00	59.90	–4.9E–6	3.9E–3	572.0E–3
825	83.93	70.99	59.89	–4.9E–6	3.9E–3	572.0E–3
826	84.38	80.00	59.88	–4.9E–6	3.9E–3	572.0E–3
827	84.97	80.00	59.88	–4.9E–6	3.9E–3	572.0E–3
828	84.95	80.00	59.87	–4.9E–6	3.9E–3	572.0E–3
829	84.41	80.00	59.86	–5.0E–6	4.0E–3	657.0E–3
830	83.93	80.00	59.85	–5.2E–6	4.1E–3	742.0E–3
831	83.93	77.89	59.84	–5.4E–6	4.2E–3	827.0E–3
832	83.93	31.99	60.25	–5.4E–6	4.2E–3	827.0E–3
833	83.93	43.57	60.73	–5.4E–6	4.2E–3	827.0E–3
834	83.93	60.28	60.80	–5.4E–6	4.2E–3	827.0E–3
835	83.93	63.29	60.81	–5.4E–6	4.2E–3	827.0E–3
836	83.93	76.57	60.81	–5.4E–6	4.2E–3	827.0E–3
837	83.93	89.86	60.81	–5.4E–6	4.2E–3	827.0E–3
838	84.19	90.00	60.80	–5.4E–6	4.2E–3	827.0E–3
839	87.32	87.00	60.79	–5.4E–6	4.2E–3	827.0E–3
840	91.88	80.00	60.78	–5.4E–6	4.2E–3	827.0E–3

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
841	92.86	73.85	60.77	–5.4E–6	4.2E–3	827.0E–3
842	92.86	62.28	60.34	–5.4E–6	4.2E–3	827.0E–3
843	92.86	69.29	59.34	–5.4E–6	4.2E–3	827.0E–3
844	94.64	70.00	58.76	–5.4E–6	4.2E–3	827.0E–3
845	94.64	62.70	58.76	–5.4E–6	4.2E–3	827.0E–3
846	94.64	40.00	58.75	–5.4E–6	4.2E–3	827.0E–3
847	93.64	40.00	58.75	–5.4E–6	4.2E–3	827.0E–3
848	92.86	32.85	58.57	–5.4E–6	4.2E–3	827.0E–3
849	92.86	30.00	58.08	–6.3E–6	5.0E–3	149.3E–3
850	92.86	0.30	57.77	–7.2E–6	5.8E–3	–528.4E–3
851	92.53	11.87	57.78	–8.1E–6	6.6E–3	–1.2E+0
852	89.84	13.12	57.80	–8.1E–6	6.6E–3	–1.2E+0
853	87.50	5.01	57.82	–8.1E–6	6.6E–3	–1.2E+0
854	86.32	10.00	57.84	–8.1E–6	6.6E–3	–1.2E+0
855	85.71	([a])	57.86	–8.1E–6	6.6E–3	–1.2E+0
856	85.71	([a])	57.88	–8.1E–6	6.6E–3	–1.2E+0
857	85.71	([a])	57.99	–8.1E–6	6.6E–3	–1.2E+0
858	85.21	([a])	58.19	–8.1E–6	6.6E–3	–1.2E+0
859	83.93	([a])	58.39	–8.1E–6	6.6E–3	–1.2E+0
860	83.93	([a])	58.59	–8.1E–6	6.6E–3	–1.2E+0
861	85.29	5.18	58.79	–8.1E–6	6.6E–3	–1.2E+0
862	87.35	([a])	59.00	–8.1E–6	6.6E–3	–1.2E+0
863	87.50	([a])	57.32	–8.1E–6	6.6E–3	–1.2E+0
864	87.50	([a])	58.15	–8.1E–6	6.6E–3	–1.2E+0
865	86.80	([a])	58.57	–8.1E–6	6.6E–3	–1.2E+0
866	85.71	6.35	58.99	–8.1E–6	6.6E–3	–1.2E+0
867	85.71	12.98	59.41	–2.7E–6	2.2E–3	–402.0E–3
868	85.71	10.00	59.38	2.7E–6	–2.2E–3	402.0E–3
869	85.65	10.00	58.90	8.1E–6	–6.6E–3	1.2E+0
870	82.14	10.00	58.42	8.1E–6	–6.6E–3	1.2E+0
871	82.14	10.00	57.46	8.1E–6	–6.6E–3	1.2E+0
872	83.02	14.89	55.85	8.1E–6	–6.6E–3	1.2E+0
873	83.93	13.54	54.38	8.1E–6	–6.6E–3	1.2E+0
874	81.06	42.12	53.19	8.1E–6	–6.6E–3	1.2E+0
875	78.64	40.40	52.00	8.1E–6	–6.6E–3	1.2E+0
876	76.99	30.00	50.80	8.1E–6	–6.6E–3	1.2E+0
877	78.57	32.75	49.59	8.1E–6	–6.6E–3	1.2E+0
878	77.80	44.32	48.39	8.1E–6	–6.6E–3	1.2E+0
879	75.73	50.00	47.07	8.1E–6	–6.6E–3	1.2E+0
880	73.67	50.00	45.71	8.1E–6	–6.6E–3	1.2E+0
881	73.21	50.00	44.46	8.1E–6	–6.6E–3	1.2E+0
882	73.32	40.00	43.27	8.1E–6	–6.6E–3	1.2E+0
883	74.22	35.64	42.10	8.1E–6	–6.6E–3	1.2E+0
884	71.43	20.00	40.89	8.1E–6	–6.6E–3	1.2E+0
885	75.23	51.95	39.61	8.1E–6	–6.6E–3	1.2E+0
886	77.34	66.21	38.22	8.1E–6	–6.6E–3	1.2E+0
887	75.28	60.00	36.96	8.1E–6	–6.6E–3	1.2E+0
888	73.21	9.96	36.06	8.1E–6	–6.6E–3	1.2E+0
889	70.85	1.61	35.23	8.1E–6	–6.6E–3	1.2E+0
890	67.29	19.56	34.02	8.1E–6	–6.6E–3	1.2E+0
891	65.22	40.00	32.37	8.1E–6	–6.6E–3	1.2E+0
892	63.15	8.35	30.81	8.1E–6	–6.6E–3	1.2E+0
893	61.09	([a])	29.57	8.1E–6	–6.6E–3	1.2E+0
894	42.10	8.95	28.26	8.1E–6	–6.6E–3	1.2E+0
895	31.96	10.00	25.94	8.1E–6	–6.6E–3	1.2E+0
896	29.42	7.38	23.56	8.1E–6	–6.6E–3	1.2E+0
897	26.04	([a])	22.00	8.1E–6	–6.6E–3	1.2E+0
898	14.71	([a])	19.21	8.1E–6	–6.6E–3	1.2E+0
899	1.90	([a])	16.51	8.1E–6	–6.6E–3	1.2E+0
900	0	0	12.12	8.1E–6	–6.6E–3	1.2E+0
901	0	0	7.07	8.1E–6	–6.6E–3	1.2E+0
902	0	0	2.60	8.1E–6	–6.6E–3	1.2E+0
903	0	0	0	8.1E–6	–6.6E–3	1.2E+0
904	0	0	0	11.0E–6	–10.7E–3	3.0E+0
905	0	0	0	14.0E–6	–14.8E–3	4.9E+0
906	0	0	0	16.9E–6	–18.8E–3	6.7E+0
907	0	0	0	16.9E–6	–18.8E–3	6.7E+0
908	0	0	0	16.9E–6	–18.8E–3	6.7E+0
909	0	0	0	16.9E–6	–18.8E–3	6.7E+0
910	0	0	0	16.9E–6	–18.8E–3	6.7E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
911	0	0	0	16.9E–6	–18.8E–3	6.7E+0
912	0	0	0	16.9E–6	–18.8E–3	6.7E+0
913	0	0	0	16.9E–6	–18.8E–3	6.7E+0
914	0	0	0	16.9E–6	–18.8E–3	6.7E+0
915	0	0	0	16.9E–6	–18.8E–3	6.7E+0
916	0	0	0	16.9E–6	–18.8E–3	6.7E+0
917	0	0	0	16.9E–6	–18.8E–3	6.7E+0
918	0	0	0	16.9E–6	–18.8E–3	6.7E+0
919	0	0	0	16.9E–6	–18.8E–3	6.7E+0
920	0	0	0	16.9E–6	–18.8E–3	6.7E+0
921	0	0	0	16.9E–6	–18.8E–3	6.7E+0
922	0	0	0	16.9E–6	–18.8E–3	6.7E+0
923	0	0	0	16.9E–6	–18.8E–3	6.7E+0
924	0	0	0	16.9E–6	–18.8E–3	6.7E+0
925	0	0	0	16.9E–6	–18.8E–3	6.7E+0
926	0	0	0	16.9E–6	–18.8E–3	6.7E+0
927	0	3.67	0	16.9E–6	–18.8E–3	6.7E+0
928	0	47.69	0	16.9E–6	–18.8E–3	6.7E+0
929	2.78	59.41	0.33	16.9E–6	–18.8E–3	6.7E+0
930	8.12	84.54	1.67	16.9E–6	–18.8E–3	6.7E+0
931	13.95	80.00	2.83	16.9E–6	–18.8E–3	6.7E+0
932	29.90	80.00	4.02	16.9E–6	–18.8E–3	6.7E+0
933	33.87	79.29	5.64	16.9E–6	–18.8E–3	6.7E+0
934	27.86	38.25	7.39	16.9E–6	–18.8E–3	6.7E+0
935	19.63	26.67	8.83	16.9E–6	–18.8E–3	6.7E+0
936	26.79	15.10	9.15	16.9E–6	–18.8E–3	6.7E+0
937	19.85	16.47	9.70	16.9E–6	–18.8E–3	6.7E+0
938	17.51	28.05	11.37	16.9E–6	–18.8E–3	6.7E+0
939	17.86	20.38	13.04	16.9E–6	–18.8E–3	6.7E+0
940	16.37	([a])	14.74	16.9E–6	–18.8E–3	6.7E+0
941	5.85	([a])	16.41	16.9E–6	–18.8E–3	6.7E+0
942	14.13	([a])	16.85	16.9E–6	–18.8E–3	6.7E+0
943	21.10	([a])	16.09	16.9E–6	–18.8E–3	6.7E+0
944	15.63	([a])	15.23	16.9E–6	–18.8E–3	6.7E+0
945	12.67	62.52	14.22	16.9E–6	–18.8E–3	6.7E+0
946	14.86	69.36	13.02	16.9E–6	–18.8E–3	6.7E+0
947	24.79	60.00	12.47	16.9E–6	–18.8E–3	6.7E+0
948	33.06	63.79	13.05	16.9E–6	–18.8E–3	6.7E+0
949	42.29	75.36	14.26	16.9E–6	–18.8E–3	6.7E+0
950	48.90	80.00	15.09	16.9E–6	–18.8E–3	6.7E+0
951	51.52	80.00	15.42	16.9E–6	–18.8E–3	6.7E+0
952	48.24	79.92	15.96	16.9E–6	–18.8E–3	6.7E+0
953	51.79	65.03	16.58	16.9E–6	–18.8E–3	6.7E+0
954	52.37	43.23	17.61	16.9E–6	–18.8E–3	6.7E+0
955	56.14	50.00	18.33	16.9E–6	–18.8E–3	6.7E+0
956	62.35	50.00	18.65	16.9E–6	–18.8E–3	6.7E+0
957	64.29	42.05	19.67	16.9E–6	–18.8E–3	6.7E+0
958	67.69	40.00	20.47	16.9E–6	–18.8E–3	6.7E+0
959	75.20	42.20	20.57	16.9E–6	–18.8E–3	6.7E+0
960	74.88	41.28	20.68	16.9E–6	–18.8E–3	6.7E+0
961	71.92	([a])	21.56	16.9E–6	–18.8E–3	6.7E+0
962	71.88	([a])	23.19	16.9E–6	–18.8E–3	6.7E+0
963	69.64	([a])	23.64	5.6E–6	–6.3E–3	2.2E+0
964	71.24	([a])	22.75	–5.6E–6	6.3E–3	–2.2E+0
965	71.72	30.54	21.81	–16.9E–6	18.8E–3	–6.7E+0
966	76.41	42.12	20.79	–16.9E–6	18.8E–3	–6.7E+0
967	73.02	50.00	19.86	–16.9E–6	18.8E–3	–6.7E+0
968	69.64	50.00	19.18	–16.9E–6	18.8E–3	–6.7E+0
969	72.09	43.16	18.75	–16.9E–6	18.8E–3	–6.7E+0
970	82.23	73.65	18.43	–16.9E–6	18.8E–3	–6.7E+0
971	78.58	([a])	18.61	–16.9E–6	18.8E–3	–6.7E+0
972	75.00	([a])	19.11	–16.9E–6	18.8E–3	–6.7E+0
973	75.00	([a])	18.76	–16.9E–6	18.8E–3	–6.7E+0
974	72.47	([a])	17.68	–16.9E–6	18.8E–3	–6.7E+0
975	62.91	([a])	16.46	–16.9E–6	18.8E–3	–6.7E+0
976	58.93	13.57	15.06	–16.9E–6	18.8E–3	–6.7E+0
977	55.56	29.43	13.41	–16.9E–6	18.8E–3	–6.7E+0
978	57.14	20.00	11.91	–16.9E–6	18.8E–3	–6.7E+0
979	56.68	17.42	11.09	–16.9E–6	18.8E–3	–6.7E+0
980	53.88	10.00	10.90	–16.9E–6	18.8E–3	–6.7E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
981	50.76	10.00	11.40	–16.9E–6	18.8E–3	–6.7E+0
982	50.00	([a])	12.38	–16.9E–6	18.8E–3	–6.7E+0
983	46.83	([a])	13.02	–16.9E–6	18.8E–3	–6.7E+0
984	35.63	10.00	12.30	–16.9E–6	18.8E–3	–6.7E+0
985	32.48	10.00	10.32	–16.9E–6	18.8E–3	–6.7E+0
986	26.79	10.00	9.70	–16.9E–6	18.8E–3	–6.7E+0
987	24.94	10.00	11.05	–16.9E–6	18.8E–3	–6.7E+0
988	23.21	16.74	11.88	–16.9E–6	18.8E–3	–6.7E+0
989	24.70	3.36	12.21	–16.9E–6	18.8E–3	–6.7E+0
990	25.00	([a])	13.29	–16.9E–6	18.8E–3	–6.7E+0
991	24.47	([a])	13.73	–16.9E–6	18.8E–3	–6.7E+0
992	18.71	([a])	12.77	–16.9E–6	18.8E–3	–6.7E+0
993	10.85	([a])	11.46	–16.9E–6	18.8E–3	–6.7E+0
994	3.40	([a])	9.84	–16.9E–6	18.8E–3	–6.7E+0
995	0	0	7.62	–16.9E–6	18.8E–3	–6.7E+0
996	0	0	3.57	–16.9E–6	18.8E–3	–6.7E+0
997	0	0.91	1.33	–16.9E–6	18.8E–3	–6.7E+0
998	0	7.52	0	–16.9E–6	18.8E–3	–6.7E+0
999	0	0	0	–16.9E–6	18.8E–3	–6.7E+0
1,000	0	0	0	–4.1E–6	5.5E–3	–3.8E+0
1,001	0	0	0	8.7E–6	–7.9E–3	–814.6E–3
1,002	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,003	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,004	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,005	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,006	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,007	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,008	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,009	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,010	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,011	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,012	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,013	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,014	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,015	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,016	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,017	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,018	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,019	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,020	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,021	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,022	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,023	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,024	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,025	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,026	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,027	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,028	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,029	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,030	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,031	1.58	([a])	0	21.5E–6	–21.2E–3	2.1E+0
1,032	1.43	([a])	0	21.5E–6	–21.2E–3	2.1E+0
1,033	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,034	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,035	1.91	9.28	0	21.5E–6	–21.2E–3	2.1E+0
1,036	2.75	0	0	21.5E–6	–21.2E–3	2.1E+0
1,037	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,038	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,039	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,040	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,041	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,042	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,043	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,044	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,045	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,046	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,047	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,048	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,049	0	5.51	0	21.5E–6	–21.2E–3	2.1E+0
1,050	0	11.34	0	21.5E–6	–21.2E–3	2.1E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
1,051	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,052	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,053	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,054	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,055	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,056	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,057	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,058	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,059	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,060	0	0.21	0	21.5E–6	–21.2E–3	2.1E+0
1,061	0	30.00	0	21.5E–6	–21.2E–3	2.1E+0
1,062	0	26.78	0	21.5E–6	–21.2E–3	2.1E+0
1,063	0	20.00	0	21.5E–6	–21.2E–3	2.1E+0
1,064	0	20.00	0	21.5E–6	–21.2E–3	2.1E+0
1,065	0	4.12	0	21.5E–6	–21.2E–3	2.1E+0
1,066	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,067	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,068	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,069	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,070	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,071	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,072	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,073	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,074	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,075	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,076	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,077	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,078	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,079	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,080	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,081	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,082	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,083	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,084	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,085	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,086	0	20.00	0	21.5E–6	–21.2E–3	2.1E+0
1,087	0	20.00	0	21.5E–6	–21.2E–3	2.1E+0
1,088	0	11.73	0	21.5E–6	–21.2E–3	2.1E+0
1,089	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,090	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,091	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,092	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,093	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,094	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,095	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,096	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,097	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,098	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,099	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,100	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,101	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,102	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,103	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,104	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,105	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,106	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,107	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,108	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,109	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,110	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,111	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,112	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,113	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,114	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,115	0	0	0	21.5E–6	–21.2E–3	2.1E+0
1,116	0	73.41	0	21.5E–6	–21.2E–3	2.1E+0
1,117	0	90.00	0	21.5E–6	–21.2E–3	2.1E+0
1,118	27.95	81.30	2.83	21.5E–6	–21.2E–3	2.1E+0
1,119	36.74	90.00	5.87	21.5E–6	–21.2E–3	2.1E+0
1,120	39.29	90.00	8.67	21.5E–6	–21.2E–3	2.1E+0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
1,121	41.44	90.00	11.47	21.5E–6	–21.2E–3	2.1E+0
1,122	45.57	82.41	14.26	21.5E–6	–21.2E–3	2.1E+0
1,123	59.52	80.00	16.91	21.5E–6	–21.2E–3	2.1E+0
1,124	66.99	90.00	18.33	21.5E–6	–21.2E–3	2.1E+0
1,125	80.22	90.00	19.35	21.5E–6	–21.2E–3	2.1E+0
1,126	86.41	93.88	21.55	21.5E–6	–21.2E–3	2.1E+0
1,127	86.53	50.94	24.84	21.5E–6	–21.2E–3	2.1E+0
1,128	84.46	17.02	26.81	21.5E–6	–21.2E–3	2.1E+0
1,129	88.54	28.60	28.36	16.8E–6	–16.9E–3	2.2E+0
1,130	89.29	39.83	30.31	12.1E–6	–12.5E–3	2.2E+0
1,131	89.29	30.00	30.82	7.4E–6	–8.1E–3	2.3E+0
1,132	89.29	26.69	30.86	7.4E–6	–8.1E–3	2.3E+0
1,133	90.16	20.00	31.82	7.4E–6	–8.1E–3	2.3E+0
1,134	89.92	20.00	33.33	7.4E–6	–8.1E–3	2.3E+0
1,135	89.29	36.06	34.20	7.4E–6	–8.1E–3	2.3E+0
1,136	85.86	40.00	33.82	7.4E–6	–8.1E–3	2.3E+0
1,137	85.51	30.00	33.51	7.4E–6	–8.1E–3	2.3E+0
1,138	84.42	32.75	33.87	7.4E–6	–8.1E–3	2.3E+0
1,139	86.48	35.68	34.70	7.4E–6	–8.1E–3	2.3E+0
1,140	88.55	30.00	36.14	7.4E–6	–8.1E–3	2.3E+0
1,141	89.29	44.93	37.60	7.4E–6	–8.1E–3	2.3E+0
1,142	90.90	50.00	38.09	7.4E–6	–8.1E–3	2.3E+0
1,143	77.27	([a])	38.13	2.5E–6	–2.7E–3	766.4E–3
1,144	56.75	([a])	38.05	–2.5E–6	2.7E–3	–766.4E–3
1,145	50.00	([a])	37.47	–7.4E–6	8.1E–3	–2.3E+0
1,146	41.07	([a])	36.69	–7.4E–6	8.1E–3	–2.3E+0
1,147	37.38	45.18	35.89	–7.4E–6	8.1E–3	–2.3E+0
1,148	34.21	78.47	35.06	–7.4E–6	8.1E–3	–2.3E+0
1,149	32.13	80.00	34.63	–7.4E–6	8.1E–3	–2.3E+0
1,150	27.71	80.00	34.13	–7.4E–6	8.1E–3	–2.3E+0
1,151	22.64	80.00	33.15	–7.4E–6	8.1E–3	–2.3E+0
1,152	20.58	60.97	32.12	–7.4E–6	8.1E–3	–2.3E+0
1,153	16.25	27.34	31.02	–7.4E–6	8.1E–3	–2.3E+0
1,154	11.46	43.71	29.82	–7.4E–6	8.1E–3	–2.3E+0
1,155	9.02	68.95	28.41	–7.4E–6	8.1E–3	–2.3E+0
1,156	3.38	68.95	26.91	–7.4E–6	8.1E–3	–2.3E+0
1,157	1.32	44.28	25.53	–7.4E–6	8.1E–3	–2.3E+0
1,158	0	0	24.21	–7.4E–6	8.1E–3	–2.3E+0
1,159	0	0	22.88	–7.4E–6	8.1E–3	–2.3E+0
1,160	0	0	18.40	–7.4E–6	8.1E–3	–2.3E+0
1,161	0	0	13.93	–7.4E–6	8.1E–3	–2.3E+0
1,162	0	0	9.45	–7.4E–6	8.1E–3	–2.3E+0
1,163	0	0	4.98	–7.4E–6	8.1E–3	–2.3E+0
1,164	0	0	0.50	–4.9E–6	5.4E–3	–1.5E+0
1,165	0	24.97	0	–2.5E–6	2.7E–3	–766.4E–3
1,166	0	17.16	0	0	0	0
1,167	0	6.20	0	0	0	0
1,168	0	10.00	0	0	0	0
1,169	0	10.00	0	0	0	0
1,170	0	0	0	0	0	0
1,171	0	0	0	0	0	0
1,172	0	0	0	0	0	0
1,173	0	0	0	0	0	0
1,174	0	0	0	0	0	0
1,175	0	0	0	0	0	0
1,176	0	0	0	0	0	0
1,177	0	0	0	0	0	0
1,178	0	0	0	0	0	0
1,179	0	0	0	0	0	0
1,180	0	0	0	0	0	0
1,181	0	0	0	0	0	0
1,182	0	0	0	0	0	0
1,183	0	0	0	0	0	0
1,184	0	0	0	0	0	0
1,185	0	0	0	0	0	0
1,186	0	0	0	0	0	0
1,187	0	0	0	0	0	0
1,188	0	0	0	0	0	0
1,189	0	0	0	0	0	0
1,190	0	0	0	0	0	0

Record (seconds)	Engine testing		Powertrain testing			
	Normalized revolutions per minute (percent)	Normalized torque (percent)	Vehicle speed (mi/hr)	Road grade coefficients		
				a	*b*	*c*
1,191	0	0	0	0	0	0
1,192	0	0	0	0	0	0
1,193	0	0	0	0	0	0
1,194	0	0	0	0	0	0
1,195	0	0	0	0	0	0
1,196	0	0	0	0	0	0
1,197	0	0	0	0	0	0
1,198	0	0	0	0	0	0
1,199	0	0	0	0	0	0

[a] Closed throttle motoring.

PART 1037—CONTROL OF EMISSIONS FROM NEW HEAVY-DUTY MOTOR VEHICLES

■ 124. The authority statement for part 1037 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 125. Amend § 1037.103 by revising paragraph (c) to read as follows:

§ 1037.103 Evaporative and refueling emission standards.

* * * * *

(c) *Compliance demonstration.* You may provide a statement in the application for certification that vehicles above 14,000 pounds GVWR comply with evaporative and refueling emission standards instead of submitting test data if you include an engineering analysis describing how vehicles include design parameters, equipment, operating controls, or other elements of design that adequately demonstrate that vehicles comply with the standards throughout the useful life. We would expect emission control components and systems to exhibit a comparable degree of control relative to vehicles that comply based on testing. For example, vehicles that comply under this paragraph (c) should rely on comparable material specifications to limit fuel permeation, and components should be sized and calibrated to correspond with the appropriate fuel capacities, fuel flow rates, purge strategies, and other vehicle operating characteristics. You may alternatively show that design parameters are comparable to those for vehicles at or below 14,000 pounds GVWR certified under 40 CFR part 86, subpart S.

* * * * *

■ 126. Amend § 1037.105 by revising the section heading and paragraph (h)(1) to read as follows:

§ 1037.105 CO_2 emission standards for vocational vehicles.

* * * * *

(h) * * *

(1) The following alternative emission standards apply by vehicle type and model year as follows:

TABLE 5 OF § 1037.105—PHASE 2 CUSTOM CHASSIS STANDARDS

[g/ton-mile]

Vehicle type [a]	Assigned vehicle service class	MY 2021–2026	MY 2027+
School bus	Medium HDV	291	271
Motor home	Medium HDV	228	226
Coach bus	Heavy HDV	210	205
Other bus	Heavy HDV	300	286
Refuse hauler	Heavy HDV	313	298
Concrete mixer	Heavy HDV	319	316
Mixed-use vehicle	Heavy HDV	319	316
Emergency vehicle	Heavy HDV	324	319

[a] Vehicle types are generally defined in § 1037.801. "Other bus" includes any bus that is not a school bus or a coach bus. A "mixed-use vehicle" is one that meets at least one of the criteria specified in § 1037.631(a)(1) and at least one of the criteria in § 1037.631(a)(2), but not both.

* * * * *

■ 127. Amend § 1037.106 by revising paragraph (b) to read as follows:

§ 1037.106 Exhaust emission standards for tractors above 26,000 pounds GVWR.

* * * * *

(b) The CO_2 standards for tractors above 26,000 pounds GVWR in Table 1 of this section apply based on modeling and testing as described in subpart F of this part. The provisions of § 1037.241 specify how to comply with these standards.

TABLE 1 OF § 1037.106—CO_2 STANDARDS FOR CLASS 7 AND CLASS 8 TRACTORS BY MODEL YEAR

[g/ton-mile]

Subcategory [a]	Phase 1 standards for model years 2014–2016	Phase 1 standards for model years 2017–2020	Phase 2 standards for model years 2021–2023	Phase 2 standards for model years 2024–2026	Phase 2 standards for model year 2027 and later
Class 7 Low-Roof (all cab styles)	107	104	105.5	99.8	96.2

TABLE 1 OF § 1037.106—CO_2 STANDARDS FOR CLASS 7 AND CLASS 8 TRACTORS BY MODEL YEAR—Continued

[g/ton-mile]

Subcategory [a]	Phase 1 standards for model years 2014–2016	Phase 1 standards for model years 2017–2020	Phase 2 standards for model years 2021–2023	Phase 2 standards for model years 2024–2026	Phase 2 standards for model year 2027 and later
Class 7 Mid-Roof (all cab styles)	119	115	113.2	107.1	103.4
Class 7 High-Roof (all cab styles)	124	120	113.5	106.6	100.0
Class 8 Low-Roof Day Cab	81	80	80.5	76.2	73.4
Class 8 Low-Roof Sleeper Cab	68	66	72.3	68.0	64.1
Class 8 Mid-Roof Day Cab	88	86	85.4	80.9	78.0
Class 8 Mid-Roof Sleeper Cab	76	73	78.0	73.5	69.6
Class 8 High-Roof Day Cab	92	89	85.6	80.4	75.7
Class 8 High-Roof Sleeper Cab	75	72	75.7	70.7	64.3
Heavy-Haul Tractors	.....	.....	52.4	50.2	48.3

[a] Sub-category terms are defined in § 1037.801.

* * * * *

■ 128. Amend § 1037.115 by revising paragraph (e) to read as follows:

§ 1037.115 Other requirements.

* * * * *

(e) *Air conditioning leakage.* Loss of refrigerant from your air conditioning systems may not exceed a total leakage rate of 11.0 grams per year or a percent leakage rate of 1.50 percent per year, whichever is greater. This applies for all refrigerants. Calculate the total leakage rate in g/year as specified in 40 CFR 86.1867–12(a). Calculate the percent leakage rate as: [total leakage rate (g/yr)] ÷ [total refrigerant capacity (g)] × 100. Round your percent leakage rate to the nearest one-hundredth of a percent.

(1) This paragraph (e) is intended to address air conditioning systems for which the primary purpose is to cool the driver compartment. This would generally include all complete pickups and vans. This paragraph (e) does not apply for refrigeration units on trailers. Similarly, it does not apply for self-contained air conditioning or refrigeration units on vocational vehicles. Air conditioning and refrigeration units may be considered to be self-contained whether or not they draw power from the propulsion engines.

(2) For purposes of this requirement, ''refrigerant capacity'' is the total mass of refrigerant recommended by the vehicle manufacturer as representing a full charge. Where full charge is specified as a pressure, use good engineering judgment to convert the pressure and system volume to a mass.

(3) If air conditioning systems with capacity above 3000 grams of refrigerant are designed such that a compliance demonstration under 40 CFR 86.1867–12(a) is impossible or impractical, you may ask to use alternative means to demonstrate that your air conditioning system achieves an equivalent level of control.

■ 129. Amend § 1037.120 by revising paragraph (b)(1) to read as follows:

§ 1037.120 Emission-related warranty requirements.

* * * * *

(b) * * * (1) Your emission-related warranty must be valid for at least:

(i) 5 years or 50,000 miles for Light HDV (except tires).

(ii) 5 years or 100,000 miles for Medium HDV and Heavy HDV (except tires).

(iii) 5 years for trailers (except tires).

(iv) 1 year for tires installed on trailers, and 2 years or 24,000 miles for all other tires.

* * * * *

■ 130. Amend § 1037.140 by revising paragraph (g) to read as follows:

§ 1037.140 Classifying vehicles and determining vehicle parameters.

* * * * *

(g) The standards and other provisions of this part apply to specific vehicle service classes for tractors and vocational vehicles as follows:

(1) Phase 1 and Phase 2 tractors are divided based on GVWR into Class 7 tractors and Class 8 tractors. Where provisions apply to both tractors and vocational vehicles, Class 7 tractors are considered ''Medium HDV'' and Class 8 tractors are considered ''Heavy HDV''. This applies for both hybrid and non-hybrid vehicles.

(2) Phase 1 vocational vehicles are divided based on GVWR. ''Light HDV'' includes Class 2b through Class 5 vehicles; ''Medium HDV includes Class 6 and Class 7 vehicles; and ''Heavy HDV includes Class 8 vehicles.

(3) This paragraph (g)(3) applies for Phase 2 vocational vehicles propelled by engines subject to the spark-ignition standards of 40 CFR part 1036. For these vehicles, ''Light HDV'' includes Class 2b through Class 5 vehicles, and ''Medium HDV'' includes Class 6 through Class 8 vehicles.

(4) This paragraph (g)(4) applies for Phase 2 vocational vehicles propelled by engines subject to the compression-ignition standards or 40 CFR part 1036.

(i) Class 2b through Class 5 vehicles are considered ''Light HDV''.

(ii) Class 6 through 8 vehicles are considered ''Heavy HDV'' if the installed engine's primary intended service class is heavy heavy-duty (see 40 CFR 1036.140).

(iii) Class 8 hybrid and electric vehicles are considered ''heavy HDV''.

(iv) All other Class 6 through Class 8 vehicles are considered ''Medium HDV''.

(5) In certain circumstances, you may certify vehicles to standards that apply for a different vehicle service class. For example, see §§ 1037.105(g) and 1037.106(f). If you optionally certify vehicles to different standards, those vehicles are subject to all the regulatory requirements as if the standards were mandatory.

* * * * *

■ 131. Amend § 1037.150 by revising paragraphs (c), (s), (y)(4), and (aa)(2) and adding paragraph (bb) to read as follows:

§ 1037.150 Interim provisions.

* * * * *

(c) *Provisions for small manufacturers.* Standards apply on a delayed schedule for manufacturers meeting the small business criteria specified in 13 CFR 121.201. Apply the small business criteria for NAICS code 336120 for vocational vehicles and tractors and 336212 for trailers; the employee limits apply to the total number employees together for affiliated companies. Qualifying small manufacturers are not subject to the greenhouse gas standards of §§ 1037.105 and 1037.106 for vehicles with a date of

manufacture before January 1, 2022, Similarly, qualifying small manufacturers are not subject to the greenhouse gas standards of § 1037.107 for trailers with a date of manufacture before January 1, 2019. In addition, qualifying small manufacturers producing vehicles that run on any fuel other than gasoline, E85, or diesel fuel may delay complying with every later standard under this part by one model year. Qualifying manufacturers must notify the Designated Compliance Officer each model year before introducing these excluded vehicles into U.S. commerce. This notification must include a description of the manufacturer's qualification as a small business under 13 CFR 121.201. You must label your excluded vehicles with the following statement: ''THIS VEHICLE IS EXCLUDED UNDER 40 CFR 1037.150(c).'' Small manufacturers may certify their vehicles under this part 1037 before standards start to apply; however, they may generate emission credits only if they certify their entire U.S.-directed production volume within the applicable averaging set for that model year. See paragraphs (r), (t), (y), and (aa) of this section for additional allowances for small manufacturers.

* * * * *

(s) *Confirmatory testing for $F_{alt\text{-}aero}$.* If we conduct coastdown testing to verify your $F_{\text{alt-aero}}$ value for Phase 2 tractors, we will make our determination using a statistical analysis consistent with the principles of SEA testing in § 1037.305. We will calculate confidence intervals from a minimum of 100 valid runs using the same SEA equations and will not replace your test results with ours if your result falls within our confidence interval or is greater than our test result. Note that we intend to minimize the differences between our test conditions and those of the manufacturer by testing at similar times of the year where possible.

* * * * *

(y) * * *

(4) Small manufacturers that certify their entire U.S.-directed production volume to the Phase 1 standards for calendar year 2021 may certify to the Phase 1 standards for model year 2022 (instead of the otherwise applicable Phase 2 standards). Phase 1 vehicle credits they generate from model year 2018 through 2022 vocational vehicles may be used through model year 2027 (instead of being subject to the five-year credit life).

* * * * *

(aa) * * *

(2) You may produce up to 200 drayage tractors in a given model year that are certified to the standards described in § 1037.105(h) for ''other buses''. This limit applies with respect to vehicles produced by you and your affiliated companies. Treat these drayage tractors as being in their own averaging set.

(bb) *Applying good engineering judgment in selecting vocational duty cycles.* Except as specified in paragraph (z) of this section, compliance with the following criteria is deemed to be consistent with good engineering judgment. Note that paragraph (bb) addresses whether other selection criteria are consistent with good engineering judgment.

(1) Any vocational vehicle may be classified as Multi-purpose.

(2) Your vocational vehicles not classified as Multi-purpose must be classified and Regional and Urban as specified in this paragraph (bb)(2). We are proposing a quantitative measure of that evaluates the ratio Regional vehicles to Urban vehicles within an averaging set. Specifically, ratio of Regional vehicles to Urban vehicles in each averaging set must be between 1:5 and 5:1. An equivalent way of saying this is that the number of Regional vehicles divided by the number of Urban vehicles would need to be between 0.20 and 5.0.

■ 132. Amend § 1037.201 by revising paragraph (h) to read as follows:

§ 1037.201 General requirements for obtaining a certificate of conformity.

* * * * *

(h) The certification and testing provisions of 40 CFR part 86, subpart S, apply instead of the provisions of this subpart relative to the evaporative and refueling emission standards specified in § 1037.103, except that § 1037.243 describes how to demonstrate compliance with evaporative emission standards. For vehicles that do not use an evaporative canister for controlling diurnal emissions, you may certify with respect to exhaust emissions and use the provisions of § 1037.622 to let a different company certify with respect to evaporative emissions.

* * * * *

■ 133. Amend § 1037.205 by revising paragraph (e) to read as follows:

§ 1037.205 What must I include in my application?

* * * * *

(e) Describe any test equipment and procedures that you used, including any special or alternate test procedures you used (see § 1037.501). Include information describing the procedures you used to determine C_dA values as specified in §§ 1037.525 through 1037.527. Describe which type of data you are using for engine fuel maps (see 40 CFR 1036.503). If your trailer certification relies on approved data from device manufacturers, identify the device and device manufacturer.

* * * * *

■ 134. Amend § 1037.225 by revising paragraph (e) to read as follows:

§ 1037.225 Amending applications for certification.

* * * * *

(e) The amended application applies starting with the date you submit the amended application, as follows:

(1) For vehicle families already covered by a certificate of conformity, you may start producing a new or modified vehicle configuration any time after you send us your amended application and before we make a decision under paragraph (d) of this section. However, if we determine that the affected vehicles do not meet applicable requirements, we will notify you to cease production of the vehicles and may require you to recall the vehicles at no expense to the owner. Choosing to produce vehicles under this paragraph (e) is deemed to be consent to recall all vehicles that we determine do not meet applicable emission standards or other requirements and to remedy the nonconformity at no expense to the owner. If you do not provide information required under paragraph (c) of this section within 30 days after we request it, you must stop producing the new or modified vehicles.

(2) If you amend your application to make the amended application correct and complete, these changes do not apply retroactively. Also, if we determine that your amended application is not correct and complete, or otherwise does not conform to the regulation, we will notify you and describe how to address the error.

* * * * *

■ 135. Amend § 1037.230 by revising paragraph (a)(2) to read as follows:

§ 1037.230 Vehicle families, sub-families, and configurations.

(a) * * *

(2) Apply subcategories for tractors (other than vocational tractors) as shown in the following table:

TABLE 2 OF § 1037.230—TRACTOR SUBCATEGORIES

Low-roof tractors	Low-roof day cabs	Low-roof sleeper cabs.
Mid-roof tractors	Mid-roof day cabs	Mid-roof sleeper cabs.
High-roof tractors	High-roof day cabs	High-roof sleeper cabs.
	Heavy-haul tractors (starting with Phase 2)	

(i) For vehicles certified to the optional tractor standards in § 1037.670, assign the subcategories as described in § 1037.670.

(ii) For vehicles intended for export to Canada, you may assign the subcategories as specified in the Canadian regulations.

* * * * *

■ 136. Amend § 1037.235 by revising paragraph (h) to read as follows:

§ 1037.235 Testing requirements for certification.

* * * * *

(h) You may ask us to use analytically derived GEM inputs for untested configurations as identified in subpart F of this part based on interpolation of all relevant measured values for related configurations, consistent with good engineering judgment. We may establish specific approval criteria based on prevailing industry practice. If we allow this, we may test any configurations. We may also require you to test any configurations as part of a selective enforcement audit.

■ 137. Amend § 1037.243 by revising paragraph (c) to read as follows:

§ 1037.243 Demonstrating compliance with evaporative emission standards.

* * * * *

(c) Apply deterioration factors to measured emission levels for comparing to the emission standard. Establish an additive deterioration factor based on an engineering analysis that takes into account the expected aging from in-use vehicles.

* * * * *

■ 138. Revise § 1037.255 to read as follows:

§ 1037.255 What decisions may EPA make regarding a certificate of conformity?

(a) If we determine an application is complete and shows that the vehicle family meets all the requirements of this part and the Act, we will issue a certificate of conformity for the vehicle family for that model year. We may make the approval subject to additional conditions.

(b) We may deny an application for certification if we determine that a vehicle family fails to comply with emission standards or other requirements of this part or the Clean Air Act. We will base our decision on all available information. If we deny an application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke a certificate of conformity if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(3) Cause any test data to become inaccurate.

(4) Deny us from completing authorized activities (see 40 CFR 1068.20). This includes a failure to provide reasonable assistance.

(5) Produce vehicles for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend an application to include all vehicles being produced.

(7) Take any action that otherwise circumvents the intent of the Act or this part, with respect to a vehicle family.

(d) We may void a certificate of conformity for a vehicle family if you fail to keep records, send reports, or give us information as required under this part or the Act. Note that these are also violations of 40 CFR 1068.101(a)(2).

(e) We may void a certificate of conformity for a vehicle family if we find that you intentionally submitted false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete after submission.

(f) If we deny an application or suspend, revoke, or void a certificate, you may ask for a hearing (see § 1037.820).

■ 139. Amend § 1037.301 by revising paragraph (b) to read as follows:

§ 1037.301 Overview of measurements related to GEM inputs in a selective enforcement audit.

* * * * *

(b) A selective enforcement audit for this part 1037 consists of performing measurements with production vehicles relative to one or more declared values for GEM inputs, and using those measured values in place of your declared values to run GEM. Except as specified in this subpart, the vehicle is considered passing if the new modeled emission result is at or below the modeled emission result corresponding to the declared GEM inputs. If you report an FEL for the vehicle configuration before the audit, we will instead consider the vehicle passing if the new cycle-weighted emission result is at or below the FEL.

* * * * *

■ 140. Amend § 1037.305 by revising the introductory text and paragraph (a) to read as follows:

§ 1037.305 Audit procedures for tractors—aerodynamic testing.

To perform a selective enforcement audit with respect to drag area for tractors, use the reference method specified in § 1037.525; we may instead require you to use the same method you used for certification. The following provisions apply instead of 40 CFR 1068.415 through 1068.425 for a selective enforcement audit with respect to drag area:

(a) Determine whether or not a tractor fails to meet standards as follows:

(1) We will select a vehicle configuration for testing. Perform a coastdown measurement with the vehicle in its production configuration according to § 1037.528. Instead of the process described in § 1037.528(h)(12), determine your test result as described in this paragraph (a). You must have an equal number of runs in each direction.

(2) Measure a yaw curve for your test vehicle using your alternate method according to § 1037.525(b)(3). You do not need to test at the coastdown effective yaw angle. You may use a previously established yaw curve from your certification testing if it is available.

(3) Using this yaw curve, perform a regression using values of drag area, C_dA_{alt}, and yaw angle, ψ_{alt}, to determine the air-direction correction coefficients, a_0, a_1, a_2, a_3, and a_4, for the following equation:

$$C_d A_{alt}(\psi) = a_0 + a_1 \cdot \psi_{alt} + a_2 \cdot \psi_{alt}^2 + a_3 \cdot \psi_{alt}^3 + a_4 \cdot \psi_{alt}^4$$

Eq. 1037.305-1

(4) Adjust the drag area value from each coastdown run, C_dA_{run}, from the yaw angle of each run, ψ_{run}, to ±4.5° to represent a wind-averaged drag area value, C_dA_{wa} by applying Eq. 1037.305–1 as follows:

$$C_d A_{wa\text{-}run} = C_d A_{run} \cdot \left[\frac{C_d A_{alt,4.5°} + C_d A_{alt,-4.5°}}{C_d A_{alt,\psi run} + C_d A_{alt,-\psi run}} \right]$$

Eq. 1037.305-2

(5) Perform additional coastdown measurements until you reach a pass or fail decision under this paragraph (a). The minimum number of runs to pass is 24. The minimum number of runs to fail is 100.

(6) Calculate statistical values to characterize cumulative test results at least once per day based on an equal number of coastdown runs in each direction. Determine the wind-averaged drag area value for the test C_dA_{wa} by averaging all $C_dA_{wa\text{-}run}$ values for all days of testing. Determine the upper and lower bounds of the drag area value, $C_dA_{wa\text{-}bounded}$, expressed to two decimal places, using a confidence interval as follows:

$$C_d A_{wa\text{-}bounded} = C_d A_{wa} \pm \left(\frac{1.5 \cdot \sigma}{\sqrt{n}} + 0.03 \right)$$

Eq. 1037.305-3

Where:

$C_dA_{wa\text{-}bounded}$ = the upper bound, $C_dA_{wa\text{-}upper}$, and lower bound, $C_dA_{wa\text{-}lower}$ of the drag area value, where $C_dA_{wa\text{-}upper}$ is the larger number.

C_dA_{wa} = the average of all $C_dA_{wa\text{-}run}$ values.

σ = the standard deviation of all C_dA_{run} values (see 40 CFR 1065.602(c)).

n = the total number of coastdown runs.

(7) Compliance is determined based on the values of $C_dA_{wa\text{-}upper}$ and $C_dA_{wa\text{-}lower}$ relative to the adjusted bin boundary. For purposes of this section, the upper limit of a bin is expressed as the specified value plus 0.05 to account for rounding. For example, for a bin including values of 5.5–5.9 m², being above the upper limit means exceeding 5.95 m². The vehicle reaches a pass or fail decision relative to the adjusted bin boundary based on one of the following criteria:

(i) The vehicle passes if $C_dA_{wa\text{-}upper}$ is less than or equal to the upper limit of the bin to which you certified the vehicle.

(ii) The vehicle fails if $C_dA_{wa\text{-}lower}$ is greater than the upper limit of the bin to which you certified the vehicle.

(iii) The vehicle passes if you perform 100 coastdown runs and $C_dA_{wa\text{-}upper}$ is greater than and $C_dA_{wa\text{-}lower}$ is lower than the upper limit of the bin to which you certified the vehicle.

(iv) The vehicle fails if you choose to stop testing before reaching a final determination under this paragraph (a)(7).

(v) Manufacturers may continue testing beyond the stopping point specified in this paragraph (a)(7). We may consider the additional data in making pass/fail determinations.

* * * * *

■ 141. Revise § 1037.320 to read as follows:

§ 1037.320 Audit procedures for axles and transmissions.

Selective enforcement audit provisions apply for axles and transmissions relative to the efficiency demonstrations of §§ 1037.560 and 1037.565 as specified in this section. The following provisions apply instead of 40 CFR 1068.415 through 1068.445 for the selective enforcement audit.

(a) A selective enforcement audit for axles or transmissions would consist of performing measurements with a production axle or transmission to determine mean power loss values as declared for GEM simulations, and running GEM over one or more applicable duty cycles based on those measured values. The axle or transmission is considered passing for a given configuration if the new modeled emission result for every applicable duty cycle is at or below the modeled emission result corresponding to the declared GEM inputs.

(b) Run GEM for each applicable vehicle configuration identified in 40 CFR 1036.540. For axle testing, this may require omitting several vehicle configurations based on selecting axle ratios that correspond to the tested axle. The GEM result for each vehicle configuration counts as a separate test for determining whether the family passes the audit.

(c) If the initial axle or transmission passes, the family passes and no further testing is required. If the initial axle or transmission does not pass, select two additional production axles or transmissions, as applicable, to perform additional tests. Use good engineering judgment to combine the results of the three tests into a single map. This becomes the official test result for the family.

■ 142. Amend § 1037.501 by adding paragraph (i) to read as follows:

§ 1037.501 General testing and modeling provisions.

* * * * *

(i) Note that declared GEM inputs for fuel maps and aerodynamic drag area will typically include compliance margins to account for testing

variability. For other measured GEM inputs, the declared values will typically be the measured values.

■ 143. Amend § 1037.510 by revising paragraphs (a)(2), (c)(3), (d), and (e) to read as follows:

§ 1037.510 Duty-cycle exhaust testing.

* * * * *

(a) * * *

(2) Perform cycle-average engine fuel mapping as described in 40 CFR 1036.540. For powertrain testing under §§ 1037.550 or 1037.555, perform testing as described in this paragraph (a)(2) to generate GEM inputs for each simulated vehicle configuration, and test runs representing different idle conditions. Perform testing as follows:

(i) *Transient cycle.* The transient cycle is specified in Appendix I of this part.

(ii) *Highway cruise cycles.* The grade portion of the route corresponding to the 55 mi/hr and 65 mi/hr highway cruise cycles is specified in Appendix IV of this part. Maintain vehicle speed between –1.0 mi/hr and 3.0 mi/hr of the speed setpoint; this speed tolerance applies instead of the approach specified in 40 CFR 1066.425(b)(1) and (2).

(iii) *Drive idle.* Perform testing at a loaded idle condition for Phase 2 vocational vehicles. For engines with an adjustable warm idle speed setpoint, test at the minimum warm idle speed and the maximum warm idle speed, otherwise test at the engine's warm idle speed. Warm up the powertrain using the vehicle settings for the Test 1 vehicle configuration as defined in Table 2 or Table 3 of 40 CFR 1036.540 by operating it at 65 mi/hr for 600 seconds. Linearly ramp the powertrain to zero vehicle speed in 20 seconds. Set the engine to operate at idle speed for 90 seconds, with the brake applied and the transmission in drive (or clutch depressed for manual transmission), and sample emissions to determine mean emission values (in g/s) over the last 30 seconds of idling.

(iv) *Parked idle.* Perform testing at an unloaded idle condition for Phase 2 vocational vehicles. For engines with an adjustable warm idle speed setpoint, test at the minimum warm idle speed and the maximum warm idle speed, otherwise test at the engine's warm idle speed. Warm up the powertrain using the vehicle settings for the Test 1 vehicle configuration by operating it at 65 mi/hr for 600 seconds. Linearly ramp the powertrain to zero vehicle speed in 20 seconds. Set the engine to operate at idle speed for 780 seconds, with the transmission in park (or the transmission in neutral with the parking brake applied for manual transmissions), and sample emissions to determine mean emission values (in g/s) over the last 600 seconds of idling.

* * * * *

(c) * * *

(3) Table 1 follows:

TABLE 1 OF § 1037.510—WEIGHTING FACTORS FOR DUTY CYCLES

	Distance-weighted (%)			Time-weighted [a] (%)			Average speed during non-idle cycles (mi/hr) [b]
	Transient	55 mi/hr cruise	65 mi/hr cruise	Drive idle	Parked idle	Non-idle	
Day Cabs	19	17	64	.....	.....	.....	.....
Sleeper Cabs	5	9	86	.....	.....	.....	.....
Heavy-haul tractors	19	17	64	.....	.....	.....	.....
Vocational—Regional	20	24	56	0	25	75	38.41
Vocational—Multi-Purpose (2b–7)	54	29	17	17	25	58	23.18
Vocational—Multi-Purpose (8)	54	23	23	17	25	58	23.27
Vocational—Urban (2b–7)	92	8	0	15	25	60	16.25
Vocational—Urban (8)	90	10	0	15	25	60	16.51
Vocational with conventional powertrain (Phase 1 only)	42	21	37	.....	.....	.....	.....
Vocational Hybrid Vehicles (Phase 1 only)	75	9	16	.....	.....	.....	.....

[a] Note that these drive idle and non-idle weighting factors do not reflect additional drive idle that occurs during the transient cycle. The transient cycle does not include any parked idle.

[b] These values apply even for vehicles not following the specified speed traces.

(d) For transient testing, compare actual second-by-second vehicle speed with the speed specified in the test cycle and ensure any differences are consistent with the criteria as specified in 40 CFR 1066.425(b) and (c). If the speeds do not conform to these criteria, the test is not valid and must be repeated.

(e) Run test cycles as specified in 40 CFR part 1066. For testing vehicles equipped with cruise control over the highway cruise cycles, you may use the vehicle's cruise control to control the vehicle speed. For vehicles equipped with adjustable vehicle speed limiters, test the vehicle with the vehicle speed limiter at its highest setting.

* * * * *

■ 144. Amend § 1037.515 by revising the section heading and paragraph (d)(2) to read as follows:

§ 1037.515 Determining CO_2 emissions to show compliance for trailers.

* * * * *

(d) * * *

(2) Apply weight reductions for other components made with light-weight materials as shown in the following table:

TABLE 3 OF § 1037.515—WEIGHT REDUCTIONS FOR TRAILERS

[pounds]

Component	Material	Weight reduction (pounds)
Structure for Suspension Assembly [a]	Aluminum	280
Hub and Drum (per axle)	Aluminum	80
Floor [2]	Aluminum	375
Floor [2]	Composite (wood and plastic)	245
Floor Crossmembers [b]	Aluminum	250
Landing Gear	Aluminum	50
Rear Door	Aluminum	187
Rear Door Surround	Aluminum	150
Roof Bows	Aluminum	100
Side Posts	Aluminum	300
Slider Box	Aluminum	150
Upper Coupler Assembly	Aluminum	430

[a] For tandem-axle suspension sub-frames made of aluminum, apply a weight reduction of 280 pounds. Use good engineering judgment to estimate a weight reduction for using aluminum sub-frames with other axle configurations.

[b] Calculate a smaller weight reduction for short trailers by multiplying the indicated values by 0.528 (28/53).

* * * * *

■ 145. Amend § 1037.520 by revising the section heading and paragraphs (b)(3)(ii), (b)(3)(iii), (e), (f), (g), (h), (i), and (j) to read as follows:

§ 1037.520 Modeling CO_2 emissions to show compliance for vocational vehicles and tractors.

* * * * *

(b) * * *

(3) * * *

(ii) For low- and mid-roof tractors, you may either use the same bin level that applies for an equivalent high-roof tractor as shown in Table 3 of this section, or you may determine your bin level based on aerodynamic test results as described in Table 4 of this section.

TABLE 4 OF § 1037.520—BIN DETERMINATIONS FOR PHASE 2 LOW-ROOF AND MID-ROOF TRACTORS BASED ON AERODYNAMIC TEST RESULTS

[C_dA in m^2]

Tractor type	Bin I	Bin II	Bin III	Bin IV	Bin V	Bin VI	Bin VII
Low-Roof Cabs	≥5.4	4.9–5.3	4.5–4.8	4.1–4.4	3.8–4.0	3.5–3.7	≤3.4
Mid-Roof Cabs	≥5.9	5.5–5.8	5.1–5.4	4.7–5.0	4.4–4.6	4.1–4.3	≤4.0

(iii) Determine the C_dA input according to the tractor's bin level as described in the following table:

TABLE 5 OF § 1037.520—PHASE 2 C_dA TRACTOR INPUTS BASED ON BIN LEVEL

Tractor type	Bin I	Bin II	Bin III	Bin IV	Bin V	Bin VI	Bin VII
High-Roof Day Cabs	7.45	6.85	6.25	5.70	5.20	4.70	4.20
High-Roof Sleeper Cabs	7.15	6.55	5.95	5.40	4.90	4.40	3.90
Low-Roof Cabs	6.00	5.60	5.15	4.75	4.40	4.10	3.80
Mid-Roof Cabs	7.00	6.65	6.25	5.85	5.50	5.20	4.90

* * * * *

(e) *Vehicle weight reduction.* Develop a weight-reduction as a GEM input as described in this paragraph (e). Enter the sum of weight reductions as described in this paragraph (e), or enter zero if there is no weight reduction. For purposes of this paragraph (e), high-strength steel is steel with tensile strength at or above 350 MPa.

(1) Vehicle weight reduction inputs for wheels are specified relative to dual-wide tires with conventional steel wheels. For purposes of this paragraph (e)(1), an aluminum alloy qualifies as light-weight if a dual-wide drive wheel made from this material weighs at least 21 pounds less than a comparable conventional steel wheel. The inputs are listed in Table 6 of this section. For example, a tractor or vocational vehicle with aluminum steer wheels and eight (4×2) dual-wide aluminum drive wheels would have an input of 210 pounds (2×21 + 8×21).

Table 6 of § 1037.520—Wheel-Related Weight Reductions

Weight-Reduction Technology		Weight Reduction—Phase 1 (lb per wheel)	Weight Reduction—Phase 2 (lb per wheel)
Wide-Base Single Drive Tire with . . .[a]	Steel Wheel	84	84
	Aluminum Wheel	139	147
	Light-Weight Aluminum Alloy Wheel	147	147
Wide-Base Single Trailer Tire with . . .[a]	Steel Wheel	—	84
	Aluminum or Aluminum Alloy Wheel	—	131
Steer Tire, Dual-wide Drive Tire, or Dual-wide Trailer Tire with . . .	High-Strength Steel Wheel	8	8
	Aluminum Wheel	21	25
	Light-Weight Aluminum Alloy Wheel	30	25

[a]The weight reduction for wide-base tires accounts for reduced tire weight relative to dual-wide tires.

(2) Weight reduction inputs for tractor components other than wheels are specified in the following table:

TABLE 7 OF § 1037.520—NONWHEEL-RELATED WEIGHT REDUCTIONS FROM ALTERNATIVE MATERIALS FOR TRACTORS

[Pounds]

Weight reduction technologies	Aluminum	High-strength steel	Thermoplastic
Door	20	6	
Roof	60	18	
Cab rear wall	49	16	
Cab floor	56	18	
Hood Support Structure System	15	3	
Hood and Front Fender			65
Day Cab Roof Fairing			18
Sleeper Cab Roof Fairing	75	20	40
Aerodynamic Side Extender			10
Fairing Support Structure System	35	6	
Instrument Panel Support Structure	5	1	
Brake Drums—Drive (set of 4)	140	74	
Brake Drums—Non Drive (set of 2)	60	42	
Frame Rails	440	87	
Crossmember—Cab	15	5	
Crossmember—Suspension	25	6	
Crossmember—Non Suspension (set of 3)	15	5	
Fifth Wheel	100	25	
Radiator Support	20	6	
Fuel Tank Support Structure	40	12	
Steps	35	6	
Bumper	33	10	
Shackles	10	3	
Front Axle	60	15	
Suspension Brackets, Hangers	100	30	
Transmission Case	50	12	
Clutch Housing	40	10	

TABLE 7 OF § 1037.520—NONWHEEL-RELATED WEIGHT REDUCTIONS FROM ALTERNATIVE MATERIALS FOR TRACTORS—Continued

[Pounds]

Weight reduction technologies	Aluminum	High-strength steel	Thermoplastic
Fairing Support Structure System	35	6	.....
Drive Axle Hubs (set of 4)	80	20	.....
Non Drive Hubs (2)	40	5	.....
Two-piece driveshaft	20	5	.....
Transmission/Clutch Shift Levers	20	4	.....

(3) Weight-reduction inputs for vocational-vehicle components other than wheels are specified in the following table:

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Table 8 of § 1037.520—Nonwheel-Related Weight Reductions from Alternative Materials for Phase 2 Vocational Vehicles (pounds)[a]

Component	Material	Vehicle Type		
		Light HDV	Medium HDV[b]	Heavy HDV
Axle Hubs - Non-Drive	Aluminum	40		40
Axle Hubs - Non-Drive	High Strength Steel	5		5
Axle - Non-Drive	Aluminum	60		60
Axle - Non-Drive	High Strength Steel	15		15
Brake Drums - Non-Drive	Aluminum	60		60
Brake Drums - Non-Drive	High Strength Steel	42		42
Axle Hubs – Drive	Aluminum	40		80
Axle Hubs – Drive	High Strength Steel	10		20
Brake Drums - Drive	Aluminum	70		140
Brake Drums - Drive	High Strength Steel	37		74
Suspension Brackets, Hangers	Aluminum	67		100
Suspension Brackets, Hangers	High Strength Steel	20		30
Crossmember – Cab	Aluminum	10	15	15
Crossmember – Cab	High Strength Steel	2	5	5
Crossmember - Non-Suspension	Aluminum	15	15	15
Crossmember - Non-Suspension	High Strength Steel	5	5	5
Crossmember -Suspension	Aluminum	15	25	25
Crossmember -Suspension	High Strength Steel	6	6	6
Driveshaft	Aluminum	12	40	50
Driveshaft	High Strength Steel	5	10	12
Frame Rails	Aluminum	120	300	440
Frame Rails	High Strength Steel	40	40	87

[a]Weight reduction values apply per vehicle unless otherwise noted.

[b]For medium HDV vehicles with 6×4 or 6×2 configurations, use the values for heavy HDVs.

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(4) Apply vehicle weight inputs for changing technology configurations as follows:

(i) For Class 8 tractors or for Class 8 vocational vehicles with a permanent 6×2 axle configuration, apply a weight reduction input of 300 pounds. This does not apply for coach buses certified to custom-chassis standards under § 1037.105(h).

(ii) For Class 8 tractors with 4×2 axle configuration, apply a weight reduction input of 400 pounds.

(iii) For tractors with installed engines with displacement below 14.0 liters, apply a weight reduction of 300 pounds.

(iv) For tractors with single-piece driveshafts with a total length greater than 86 inches, apply a weight reduction of 43 pounds for steel driveshafts and 63 pounds for aluminum driveshafts.

(5) You may ask to apply the off-cycle technology provisions of § 1037.610 for weight reductions not covered by this paragraph (e).

(f) *Engine characteristics.* Enter information from the engine manufacturer to describe the installed engine and its operating parameters as described in 40 CFR 1036.503. The fuel-mapping information must apply for the vehicle's GVWR; for example, if you install a medium heavy-duty engine in a Class 8 vehicle, the engine must have

additional fuel-mapping information for the heavier vehicle. Note that you do not need fuel consumption at idle for tractors.

(g) *Vehicle characteristics.* Enter the following information to describe the vehicle and its operating parameters:

(1) Transmission make, model, and type. Also identify the gear ratio for every available forward gear to two decimal places, the input torque limit for each of the forward gears, and, if applicable, the lowest gear involving a locked torque converter. For vehicles with a manual transmission, GEM applies a 2% emission increase relative to automated manual transmissions. If your vehicle has a dual-clutch transmission, use good engineering judgment to determine if it can be accurately represented in GEM as an automated manual transmission. We may require you to perform a powertrain test with dual-clutch transmissions to show that they can be properly simulated as an automated manual transmission.

(2) Drive axle make, model, and configuration type. Select a drive axle configuration to represent your vehicle for modeling.

(i) 4×2: One drive axle and one non-drive axle.

(ii) 6×2: One drive axle and two non-drive axles.

(iii) 6×4: Two or more drive axles, or more than three total axles. Note that this includes, for example, a vehicle with two drive axles out of four total axles (otherwise known as an 8×4 configuration).

(iv) 6×4D: One non-drive axle and two drive axles, including one disconnectable drive axle. The axle configuration can automatically switch between 6×2 and 6×4 configurations. You may select this configuration if at least one of the following is true:

(A) The input and output of the disconnectable axle is mechanically disconnected from the drive shaft and the wheels when the axle is in the 6×2 configuration.

(B) You provide power loss data generated according to § 1037.560.

(3) Drive axle ratio, k_a. If a vehicle is designed with two or more user-selectable axle ratios, use the drive axle ratio that is expected to be engaged for the greatest driving distance. If the vehicle does not have a drive axle, such as a hybrid vehicle with direct electric drive, let $k_a = 1$.

(4) GEM inputs associated with powertrain testing include powertrain family, transmission calibration identifier, test data from § 1037.550, and the powertrain test configuration (dynamometer connected to transmission output or wheel hub). You do not need to identify or provide inputs for transmission gear ratios, fuel map data, or engine torque curves, which would otherwise be required under paragraph (f) of this section.

(h) *Idle speed and idle-reduction technologies.* (1) Input your vehicle idle speed as follows:

(i) For heavy heavy-duty vehicles input your vehicle's maximum adjustable idle speed or 600 rpm, whichever is lower.

(ii) For light heavy-duty and medium heavy-duty vehicles input your vehicle's maximum adjustable idle speed or 750 rpm, whichever is lower.

(iii) For spark-ignition vehicles input your vehicle's maximum adjustable idle speed or 600 rpm, whichever is lower.

(2) Identify whether your vehicle has qualifying idle-reduction technologies, subject to the qualifying criteria in § 1037.660, as follows:

(i) Stop-start technology and automatic engine shutdown systems apply for vocational vehicles. See paragraph (j) of this section for automatic engine shutdown systems for tractors.

(ii) Neutral idle applies for tractors and vocational vehicles.

(i) *Axle, transmission, and torque converter characterization.* You may characterize the axle, transmission, and torque converter and use axle efficiency maps as described in § 1037.560, transmission efficiency maps as described in § 1037.565, and torque converter capacity factors as described in § 1037.570 to replace the default values in GEM. If you obtain your test results from the axle manufacturer, transmission manufacturer, torque converter manufacturer or another third party, you must obtain a signed statement from the party supplying those test results to verify that tests were conducted according to the requirements of this part. Such statements are deemed to be submissions to EPA.

(j) *Additional reduction technologies.* Enter input values in GEM as follows to characterize the percentage CO_2 emission reduction corresponding to certain technologies and vehicle configurations, or enter 0:

(1) *Intelligent controls.* Enter 2 for tractors with predictive cruise control. This includes any cruise control system that incorporates satellite-based global-positioning data for controlling operator demand. Enter 1.5 for tractors and vocational vehicles if they have neutral coasting, unless good engineering judgment indicates that a lower percentage should apply.

(2) *Accessory load.* Enter the following values related to accessory loads; if more than one item applies, enter the sum of those values:

(i) If vocational vehicles have electrically powered pumps for steering, enter 0.5 for vocational vehicles certified with the Regional duty cycle, and enter 1 for other vocational vehicles.

(ii) If tractors have electrically powered pumps for both steering and engine cooling, enter 1.

(iii) If vehicles have a high-efficiency air conditioning compressor, enter 0.5 for tractors and vocational Heavy HDV, and enter 1 for other vocational vehicles. This includes mechanically powered compressors meeting the specifications described in 40 CFR 86.1868–12(h)(5), and all electrically powered compressors.

(3) *Tire-pressure systems.* Enter 1.2 for vehicles with automatic tire inflation systems on all axles (1.1 for Multi-Purpose and Urban vocational vehicles). Enter 1.0 for vehicles with tire pressure monitoring systems on all axles (0.9 for Multi-Purpose and Urban vocational vehicles). If vehicles use a mix of the two systems, treat them as having only tire pressure monitoring systems.

(4) *Extended-idle reduction.* Enter values as shown in the following table for sleeper cabs equipped with idle-reduction technology meeting the requirements of § 1037.660 that are designed to automatically shut off the main engine after 300 seconds or less:

TABLE 9 OF § 1037.520—GEM INPUT VALUES FOR AES SYSTEMS

Technology	GEM input values	
	Adjustable	Tamper-resistant
Standard AES system	1	4
With diesel APU	3	4

TABLE 9 OF § 1037.520—GEM INPUT VALUES FOR AES SYSTEMS—Continued

Technology	GEM input values	
	Adjustable	Tamper-resistant
With battery APU	5	6
With automatic stop-start	3	3
With fuel-operated heater (FOH)	2	3
With diesel APU and FOH	4	5
With battery APU and FOH	5	6
With stop-start and FOH	4	5

(5) *Other.* Additional GEM inputs may apply as follows:

(i) Enter 0.9 and 1.7, respectively, for school buses and coach buses that have at least seven available forward gears.

(ii) If we approve off-cycle technology under § 1037.610 in the form of an improvement factor, enter the improvement factor expressed as a percentage reduction in CO_2 emissions. (*Note:* In the case of approved off-cycle technologies whose benefit is quantified as a g/ton-mile credit, apply the credit to the GEM result, not as a GEM input value.)

* * * * *

■ 146. Amend § 1037.525 by revising paragraph (b) to read as follows:

§ 1037.525 Aerodynamic measurements for tractors.

* * * * *

(b) *Adjustments to correlate with coastdown testing.* Adjust aerodynamic drag values from alternate methods to be equivalent to the corresponding values from coastdown measurements as follows:

(1) Determine the functional relationship between your alternate method and coastdown testing. Specify this functional relationship as $F_{\text{alt-aero}}$ for a given alternate drag measurement method using the following equation:

$$F_{\text{alt-aero}} = \frac{C_d A_{\text{wind-averaged-cd}}}{C_d A_{\text{wind-averaged-alt}}}$$

Eq. 1037.525-1

(2) Unless good engineering judgment dictates otherwise, assume that coastdown drag is proportional to drag measured using alternate methods and apply a constant adjustment factor, $F_{\text{alt-aero}}$, for a given alternate drag measurement method of similar vehicles.

(3) Determine $F_{\text{alt-aero}}$ by performing coastdown testing and applying your alternate method on the same vehicles. Consider all applicable test data including data collected during selective enforcement audits. Unless we approve another vehicle, one vehicle must be a Class 8 high-roof sleeper cab with a full aerodynamics package pulling a standard trailer. Where you have more than one tractor model meeting these criteria, use the tractor model with the highest projected sales. If you do not have such a tractor model, you may use your most comparable tractor model with our prior approval. In the case of alternate methods other than those specified in this subpart, good engineering judgment may require you to determine your adjustment factor based on results from more than the specified minimum number of vehicles.

(4) Measure the drag area using your alternate method for a Phase 2 tractor used to determine $F_{\text{alt-aero}}$ with testing at yaw angles of 0°, ±1°, ±3°, ±4.5°, ±6°, and ±9° (you may include additional angles), using direction conventions described in Figure 2 of SAE J1252 (incorporated by reference in § 1037.810). Also, determine the drag area at the coastdown effective yaw angle, $C_d A_{\text{effective-yaw-alt}}$, by taking the average drag area at ψ_{eff} and $-\psi_{\text{eff}}$ for your vehicle using the same alternate method.

(5) For Phase 2 testing, determine separate values of $F_{\text{alt-aero}}$ for a minimum of one high-roof day cab and one high-roof sleeper cab for 2021, 2024, and 2027 model years based on testing as described in paragraph (b)(2) of this section (six tests total). Alternatively, you may test earlier model years than specified here. For any untested tractor models, apply the value of $F_{\text{alt-aero}}$ from the tested tractor model that best represents the aerodynamic characteristics of the untested tractor model, consistent with good engineering judgment. Testing under this paragraph (b)(4) continues to be valid for later model years until you change the tractor model in a way that causes the test results to no longer represent production vehicles. You must also determine unique values of $F_{\text{alt-aero}}$ for low-roof and mid-roof tractors if you determine $C_d A$ values based on low or mid-roof tractor testing as shown in Table 4 of § 1037.520. For Phase 1 testing, if good engineering judgment allows it, you may calculate a single, constant value of $F_{\text{alt-aero}}$ for your whole product line by dividing the coastdown drag area, $C_d A_{\text{coastdown}}$, by $C_d A_{\text{alt}}$.

(6) Determine $F_{\text{alt-aero}}$ to at least three decimal places. For example, if your coastdown testing results in a drag area of 6.430, but your wind tunnel method results in a drag area of 6.200, $F_{\text{alt-aero}}$ would be 1.037 (or a higher value you declare).

(7) If a tractor and trailer cannot be configured to meet the gap requirements, test with the trailer positioned as close as possible to the specified gap dimension and use good engineering judgment to correct the results to be equivalent to a test configuration meeting the specified gap dimension. This allowance applies for all testing, including confirmatory and SEA testing.

(8) Manufacturers should coordinate Falt-aero coastdown testing with EPA before testing to enable EPA to witness the testing.

* * * * *

■ 147. Amend § 1037.528 by revising the section heading, paragraph (c) introductory text, paragraph (e) introductory text, paragraph (g)(3) introductory text, and paragraphs (h)(3)(i) and (h)(6) to read as follows:

§ 1037.528 Coastdown procedures for calculating drag area ($C_d A$).

* * * * *

(c) The test condition specifications described in Sections 7.1 through 7.4 of SAE J1263 apply, with certain exceptions and additional provisions as described in this paragraph (c). These conditions apply to each run separately.

* * * * *

(e) Measure wind speed, wind direction, air temperature, and air pressure at a recording frequency of 10 Hz, in conjunction with time-of-day data. Use at least one stationary anemometer and suitable data loggers meeting SAE J1263 specifications, subject to the following additional

specifications for the anemometer placed along the test surface:

* * * * *

(g) * * *

(3) Correct measured air direction from all the high-speed segments using the wind speed and wind direction measurements described in paragraph (e) of this section as follows:

* * * * *

(h) * * *

(3) * * *

(i) Calculate the mean vehicle speed to represent the start point of each speed range as the arithmetic average of measured speeds throughout the continuous time interval that begins when measured vehicle speed is less than 2.00 mi/hr above the nominal starting speed point and ends when measured vehicle speed reaches 2.00 mi/hr below the nominal starting speed point, expressed to at least two decimal places. Calculate the timestamp corresponding to the starting point of each speed range as the average timestamp of the interval.

* * * * *

(6) For tractor testing, calculate the tire rolling resistance force at high and low speeds for steer, drive, and trailer axle positions, $F_{TRR[speed,axle]}$, and determine ΔF_{TRR} as follows:

(i) Conduct a stepwise coastdown tire rolling resistance test with three tires for each tire model installed on the vehicle using SAE J2452 (incorporated by reference in § 1037.810) for the following test points (which replace the test points in Table 3 of SAE J2452):

TABLE 1 OF § 1037.528—STEPWISE COASTDOWN TEST POINTS FOR DETERMINING TIRE ROLLING RESISTANCE AS A FUNCTION OF SPEED

Step #	Load (% of max)	Inflation pressure (% of max)
1	20	100
2	55	70
3	85	120
4	85	100
5	100	95

(ii) Determine the rolling resistance difference between 65 mph and 15 mph for each tire. Use good engineering judgment to consider the multiple results. For example, you may ignore the test results for the tires with the highest and lowest differences and use the result from the remaining tire.

(iii) Calculate $F_{TRR[speed,axle]}$ using the following equation:

$$F_{TRR[speed,axle]} = n_{t,[axle]} \cdot p_{[axle]}^{\alpha} \cdot \left(\frac{L_{[axle]}}{n_{t,[axle]}}\right)^{\beta_{[axle]}} \cdot \left(a_{[axle]} + b_{[axle]} \cdot \overline{v}_{seg[speed]} + c_{[axle]} \cdot \overline{v}_{seg[speed]}^{2}\right)$$

Eq. 1037.528-11

Where:

$n_{t,[axle]}$ = number of tires at the axle position.

$p_{[axle]}$ = the inflation pressure set and measured on the tires at the axle position at the beginning of the coastdown test.

$L_{[axle]}$ = the load over the axle at the axle position on the coastdown test vehicle.

$\alpha_{[axle]}$, $\beta_{[axle]}$, $a_{[axle]}$, $b_{[axle]}$, and $c_{[axle]}$ = regression coefficients from SAE J2452 that are specific to axle position.

Example:

$n_{t,steer} = 2$

$p_{steer} = 758.4$ kPa

$L_{steer} = 51421.2$ N

$\alpha_{steer} = -0.2435$

$\beta_{steer} = 0.9576$

$a_{steer} = 0.0434$

$b_{steer} = 5.4 \cdot 10^{-5}$

$c_{steer} = 5.53 \cdot 10^{-7}$

$n_{t,drive} = 8$

$p_{drive} = 689.5$ kPa

$L_{drive} = 55958.4$ N

$\alpha_{drive} = -0.3146$

$\beta_{drive} = 0.9914$

$a_{drive} = 0.0504$

$b_{drive} = 1.11 \cdot 10^{-4}$

$c_{drive} = 2.86 \cdot 10^{-7}$

$n_{t,trailer} = 8$

$p_{trailer} = 689.5$ kPa

$L_{trailer} = 45727.5$ N

$\alpha_{trailer} = -0.3982$

$\beta_{trailer} = 0.9756$

$a_{trailer} = 0.0656$

$b_{trailer} = 1.51 \cdot 10^{-4}$

$c_{trailer} = 2.94 \cdot 10^{-7}$

$\bar{v}_{seghi} = 28.86$ m/s = 103.896 km/hr

$\bar{v}_{seglo} = 5.84$ m/s = 21.024 km/hr

$$F_{TRRhi,steer} = 2 \cdot 758.4^{-0.2435} \cdot \left(\frac{51421.2}{2}\right)^{0.9576} \cdot \left(0.0434 + 5.4 \cdot 10^{5} \cdot 103.896 + 5.53 \cdot 10^{-7} \cdot 103.896^{2}\right)$$

$F_{TRRhi,steer} = 365.6$ N

$F_{TRRhi,drive} = 431.4$ N

$F_{TRRhi,trailer} = 231.7$ N

$F_{TRRlo,steer} = 297.8$ N

$F_{TRRlo,drive} = 350.7$ N

$F_{TRRlo,trailer} = 189.0$ N

(iv) Calculate $F_{TRR[speed]}$ by summing the tire rolling resistance calculations at a given speed for each axle position:

$$F_{TRR[speed]} = F_{TRR,[speed]steer} + F_{TRR,[speed]drive} + F_{TRR,[speed]trailer}$$

Eq. 1037.528-12

Example:

$F_{TRRhi} = 365.6 + 431.4 + 231.7 = 1028.7$ N

$F_{TRRlo} = 297.8 + 350.7 + 189.0 = 837.5$ N

(v) Adjust $F_{TRR[speed]}$ to the ambient temperature during the coastdown segment as follows:

$$F_{\mathrm{TRRadj[speed]}} = F_{\mathrm{TRR,[speed]}}\left[1 + 0.006 \cdot (24 - \overline{T}_{seg[speed]})\right]$$

Eq. 1037.528-13

Where:

$\bar{T}_{\mathrm{seg[speed]}}$ = the average ambient temperature during the coastdown segment, in °C.

Example:

F_{TRRhi} = 1028.7 N
F_{TRRlo} = 837.5 N
$\bar{T}_{\mathrm{seghi}}$ = 25.5 °C
$\bar{T}_{\mathrm{seglo}}$ = 25.1 °C
$F_{\mathrm{TRRhi,adj}}$ = 1028.7·[1 + 0.006·(24 − 25.5)] = 1019.4 N
$F_{\mathrm{TRRlo,adj}}$ = 837.5·[1 + 0.006·(24 − 25.1)] = 832.0 N

(v) Determine ΔF_{TRR} as follows:

$$\Delta F_{\mathrm{TRR}} = F_{\mathrm{TRRhi,adj}} - F_{\mathrm{TRRlo,adj}}$$

Eq. 1037.528-14

Example:

ΔF_{TRR} = 1019.4 − 832.0 = 187.4 N

* * * * *

■ 148. Amend § 1037.540 by revising the section heading to read as follows:

§ 1037.530 Wind-tunnel procedures for calculating drag area (C_dA).

* * * * *

■ 149. Amend § 1037.532 by revising the section heading and paragraph (a)(1) to read as follows:

§ 1037.532 Using computational fluid dynamics to calculate drag area (C_dA).

* * * * *

(a) * * *

(1) Vehicles are subject to the requirement to meet standards based on the average of testing at yaw angles of +4.5° and −4.5°; however, you may submit your application for certification with CFD results based on only one of those yaw angles.

* * * * *

■ 150. Amend § 1037.534 by revising the section heading to read as follows.

§ 1037.534 Constant-speed procedure for calculating drag area (C_dA).

* * * * *

■ 151. Amend § 1037.540 by revising paragraphs (b)(8), (e)(2), and (f)(2) to read as follows:

§ 1037.540 Special procedures for testing vehicles with hybrid power take-off.

* * * * *

(b) * * *

(8) Measured pressures must meet the cycle-validation specifications in the following table for each test run over the duty cycle:

TABLE 1 OF § 1037.540—STATISTICAL CRITERIA FOR VALIDATING EACH TEST RUN OVER THE DUTY CYCLE

Parameter [a]	Pressure
Slope, a_1	$0.950 \le a_1 \le 1.030$.
Absolute value of intercept, $\lvert a_0 \rvert$.	≤2.0% of maximum mapped pressure.
Standard error of estimate, *SEE*.	≤10% of maximum mapped pressure.
Coefficient of determination, r^2.	≥0.970.

[a] Determine values for specified parameters as described in 40 CFR 1065.514(e) by comparing measured values to denormalized pressure values from the duty cycle in Appendix II of this part.

* * * * *

(e) * * *

(2) Divide the CO_2 mass from the PTO cycle by the distance determined in paragraph (d)(4) of this section and the standard payload as defined in § 1037.801 to get the CO_2 emission rate in g/ton-mile. For plug-in hybrid electric vehicles follow paragraph (f)(3) of this section to calculate utility factor weighted CO_2 emissions in g/ton-mile.

* * * * *

(f) * * *

(2) Divide the fuel mass by the applicable distance determined in paragraph (d)(4) of this section and the appropriate standard payload as defined in § 1037.801 to determine the fuel rate in g/ton-mile.

* * * * *

■ 152. Revise § 1037.550 to read as follows:

§ 1037.550 Powertrain testing.

(a) This section describes how to determine engine fuel maps using a measurement procedure that involves testing an engine coupled with a powertrain to simulate vehicle operation. Engine fuel maps are part of demonstrating compliance with Phase 2 vehicle standards under this part 1037; this fuel-mapping information may come from different types of testing as described in 40 CFR 1036.503.

(b) Perform powertrain testing to establish measured fuel-consumption rates over applicable duty cycles for several different vehicle configurations. The following general provisions apply:

(1) Measure NO_X emissions for each sampling period in grams. You may perform these measurements using a NO_X emission-measurement system that meets the requirements of 40 CFR part 1065, subpart J. Include these measured NO_X values any time you report to us your greenhouse gas emissions or fuel consumption values from testing under this section. If a system malfunction prevents you from measuring NO_X emissions during a test under this section but the test otherwise gives valid results, you may consider this a valid test and omit the NO_X emission measurements; however, we may require you to repeat the test if we determine that you inappropriately voided the test with respect to NO_X emission measurement.

(2) This section uses engine parameters and variables that are consistent with 40 CFR part 1065.

(3) Use one of the following options to create the vehicle model:

(i) Use the detailed equations in this section.

(ii) Use a MATLAB/Simulink code in GEM to create the vehicle model (incorporated by reference in § 1037.810). If you use this option, set the accessory load in GEM to zero. This option is required if you are testing a hybrid powertrain system where the transmission is not part of the test, but is required when installed in the vehicle.

(c) Select an engine and powertrain for testing as described in § 1037.231.

(d) Set up the engine according to 40 CFR 1065.110.

(1) The default test configuration involves connecting the powertrain's transmission output shaft directly to the dynamometer and measuring torque at the axle input shaft for use in the vehicle model. You may instead set up the dynamometer to connect at the wheel hubs if your powertrain configuration requires it, such as for hybrid powertrains, or if you want to represent the axle performance with powertrain test results. If you measure torque at the wheel hubs for use in the vehicle model, input your test results into GEM to reflect this.

(2) For testing hybrids that do not include the transmission or axle, connect the powertrain's output shaft that would connect to the transmission directly to the dynamometer.

(e) Cool the powertrain during testing so temperatures for oil, coolant, block, head, transmission, battery, and power electronics are within the manufacturer's expected ranges for

normal operation. You may use ECM measurements to comply with this requirement. You may use auxiliary coolers and fans.

(f) Break in the engine according to 40 CFR 1065.405, the axle assembly according to § 1037.560, and the transmission according to § 1037.565. You may break in the powertrain as a complete system by following the engine break in procedure according to 40 CFR 1065.405.

(g) Set the dynamometer to operate in speed-control mode. Record data as described in 40 CFR 1065.202. Command and control dynamometer speed at a minimum of 5 Hz. If you choose to command the dynamometer at a slower rate than the calculated dynamometer speed setpoint, use good engineering judgment to subsample the calculated setpoints for use in commanding the dynamomemter speed setpoint. Design a vehicle model to use the measured torque and calculate the dynamometer speed setpoint at a rate of at least 100 Hz, as follows:

(1) For testing with the speed measurement at the axle input shaft, calculate the dynamometer's angular speed target, $f_{\mathrm{nref,dyno}}$, based on the simulated linear speed of the tires:

$$f_{\mathrm{nref}i,\mathrm{dyno}} = \frac{k_{\mathrm{a[speed]}} \cdot v_{\mathrm{ref}i}}{2 \cdot \pi \cdot r_{\mathrm{[speed]}}}$$

Eq. 1037.550-1

Where:

$k_{\mathrm{a[speed]}}$ = drive axle ratio as determined in paragraph (i) of this section.

$v_{\mathrm{ref}i}$ = simulated vehicle reference speed. Use the unrounded result for calculating $f_{\mathrm{nref}i,\mathrm{dyno}}$.

$r_{\mathrm{[speed]}}$ = tire radius as determined in paragraph (i) of this section.

$$v_{\mathrm{ref}i} = \left(\frac{k_{\mathrm{a}} \cdot T_{i\text{-}1}}{r} \cdot \left(Eff_{\mathrm{axle}} \right) - \left(M \cdot g \cdot C_{\mathrm{rr}} \cdot \cos\left(\mathrm{atan}\left(G_{i\text{-}1} \right) \right) + \frac{\rho \cdot C_{\mathrm{d}} A}{2} \cdot v_{\mathrm{ref},i\text{-}1}^{2} \right) - F_{\mathrm{brake},i\text{-}1} - F_{\mathrm{grade},i\text{-}1} \right) \cdot \frac{\Delta t_{i\text{-}1}}{M + M_{\mathrm{rotating}}} + v_{\mathrm{ref},i\text{-}1}$$

Eq. 1037.550-2

Where:

i = a time-based counter corresponding to each measurement during the sampling period. Let $v_{\mathrm{ref1}} = 0$; start calculations at $i = 2$. A 10-minute sampling period will generally involve 60,000 measurements.

T = instantaneous measured torque.

Eff_{axle} = axle efficiency. Use $Eff_{\mathrm{axle}} = 0.955$ for $T \geq 0$, and use $Eff_{\mathrm{axle}} = 1/0.955$ for $T < 0$.

To calculate $f_{\mathrm{nref}i,\mathrm{dyno}}$ for a dynamometer connected at the wheel hubs, as described in paragraph (f)(2) of this section, use $Eff_{\mathrm{axle}} = 1.0$.

M = vehicle mass for a vehicle class as determined in paragraph (i) of this section.

g = gravitational constant = 9.81 m/s^2.

C_{rr} = coefficient of rolling resistance for a vehicle class as determined in paragraph (i) of this section.

$G_{i\text{-}1}$ = the percent grade interpolated at distance, $D_{\mathrm{i}\text{-}1}$, from the duty cycle in Appendix IV corresponding to measurement (i–1).

$$D_{i\text{-}1} = \sum_{i=1}^{N} \left(v_{\mathrm{ref},i\text{-}1} \cdot \Delta t_{i\text{-}1} \right)$$

Eq. 1037.550-3

ρ = air density at reference conditions. Use ρ = 1.1845 kg/m^3.

$C_{\mathrm{d}}A$ = drag area for a vehicle class as determined in paragraph (i) of this section.

$F_{\mathrm{brake},i\text{-}1}$ = instantaneous braking force applied by the driver model.

$$F_{\mathrm{grade},i\text{-}1} = M \cdot g \cdot \sin\left(\mathrm{atan}\left(G_{i\text{-}1} \right) \right)$$

Eq. 1037.550-4

Δt = the time interval between measurements. For example, at 100 Hz, $\Delta t = 0.0100$ seconds.

M_{rotating} = inertial mass of rotating components. Let M_{rotating} = 340 kg for vocational Light HDV or vocational Medium HDV. See paragraph (i) of this section for tractors and for vocational Heavy HDV.

Example:

This example is for a vocational Light HDV or vocational Medium HDV with 6 speed automatic transmission at B speed (Test 4 in Table 2 of 40 CFR 1036.540).

$k_{\mathrm{aB}} = 4.0$

$r_{\mathrm{B}} = 0.399$ m

$T_{999} = 500.0$ N·m

$C_{\mathrm{rr}} = 7.7$ kg/tonne $= 7.7 \cdot 10^{-3}$ kg/kg

$M = 11408$ kg

$C_{\mathrm{d}}A = 5.4$ m^2

$G_{999} = 0.39\% = 0.0039$

$$D_{999} = \sum_{i=0}^{998} \left(19.99 \cdot 0.01 + 20.0 \cdot 0.01 + \ldots + v_{\mathrm{ref},998} \cdot \Delta t_{998} \right) = 1792\,\mathrm{m}$$

$F_{\mathrm{brake},999}$ –0 N

$v_{\mathrm{ref},999} = 20.0$ m/s

$F_{\mathrm{grade},999} = 11408 \cdot 9.81 \cdot \sin(\mathrm{atan}(0.0039)) = 436.5$ N

$\Delta t = 0.0100$ s

$M_{\mathrm{rotating}} = 340$ kg

$$v_{\text{ref1000}} = \left(\frac{4.0 \cdot 500.0}{0.399} \cdot (0.955) - \left(11408 \cdot 9.81 \cdot 7.7 \cdot 10^{-3} \cdot \cos\left(\text{atan}\left(0.0039\right)\right) + \frac{1.1845 \cdot 5.4}{2} \cdot 20.0^2 \right) - 0 - 436.5 \right) \cdot \frac{0.0100}{11408 + 340} + 20.0$$

$$v_{\text{ref1000}} = 20.00189 \text{ m/s}$$

$$f_{\text{nref1000,dyno}} = \frac{4.0 \cdot 20.00262}{2 \cdot 3.14 \cdot 0.399} = 31.93 \text{ r/s} = 1915.8 \text{ r/min}$$

(2) For testing with the speed measurement at the wheel hubs, calculate $f_{\text{nref,dyno}}$ using Eq. 1037.550–1, setting $k_{\text{a[speed]}}$ equal to 1.

(h) Design a driver model to simulate a human driver modulating the throttle and brake pedals to follow the test cycle as closely as possible. The driver model must meet the speed requirements for operation over the highway cruise cycles as described in § 1037.510 and for operation over the transient cycle as described in 40 CFR 1066.425(b). The exceptions in 40 CFR 1066.425(b)(4) apply to the transient cycle and the highway cruise cycles. Design the driver model to meet the following specifications:

(1) Send a brake signal when throttle position is zero and vehicle speed is greater than the reference vehicle speed from the test cycle. Include a delay before changing the brake signal to prevent dithering, consistent with good engineering judgment.

(2) Allow braking only if throttle position is zero.

(3) Compensate for the distance driven over the duty cycle over the course of the test. Use the following equation to perform the compensation in real time to determine your time in the cycle:

$$t_{\text{cycle}i} = \sum_{i=1}^{N} \left(\left(\frac{v_{\text{vehicle},i\text{-}1}}{v_{\text{cycle},i\text{-}1}} \right) \cdot \Delta t_{i\text{-}1} \right)$$

Eq. 1037.550-6

Where:

v_{vehicle} = measured vehicle speed.

v_{cycle} = reference speed from the test cycle. If $v_{\text{cycle,i-1}} < 1.0$ m/s, set $v_{\text{cycle,i-1}} = v_{\text{vehicle,i-1}}$.

(i) Configure the vehicle model in the test cell to test the powertrain using at least three equally spaced axle ratios or tire sizes and three different road loads (nine configurations), or at least four equally spaced axle ratios or tire sizes and two different road loads (eight configurations) to cover the range of intended vehicle applications. Select axle ratios to represent the full range of expected vehicle installations. Determine the vehicle model inputs for vehicle mass, C_dA, and C_{rr} for a set of vehicle configurations as described in 40 CFR 1036.540(c)(3). You may instead test to simulate eight or nine vehicle configurations from different vehicle categories if you limit your powertrains to a certain range of vehicles. For example, if your powertrain will be installed only in vocational Medium HDV and vocational Heavy HDV, you may perform testing to represent eight or nine vehicle configurations using vehicle masses for Medium HDV and Heavy HDV, the predefined C_dA for those vehicles, and the lowest and highest C_{rr} of the tires that will be installed on those vehicles. Also, instead of selecting axle ratios and tire sizes based on the range of intended vehicle applications as described in this paragraph (i), you may select axle ratios and tire sizes such that the ratio of engine speed over vehicle speed covers the range of ratios of minimum and maximum engine speed over vehicle speed when the transmission is in top gear for the vehicles the powertrain will be installed in. For hybrid powertrain systems where the transmission will be part of the vehicle model, use the transmission parameters defined in Table 1 of 40 CFR 1036.540 to determine transmission type and gear ratio and a fixed transmission efficiency of 0.95.

(j) Operate the powertrain over each of the duty cycles specified in § 1037.510(a)(2), and for each applicable test configuration identified in 40 CFR 1036.540(c). Test the powertrain according to 40 CFR 1036.540(d), understanding ''engine'' to mean ''powertrain'', with the following exceptions:

(1) Add a 20-second transition period between adjacent duty cycles. If you are transitioning from an engine stop situation, transition to the next cycle within 60 seconds. For cruise cycles, add a 40-second stabilization period after the transition period before starting the next cycle.

(2) You may use GEM or your own vehicle model to calculate cycle work for determining cycle run order.

(3) Calculate the mass of fuel consumed for the idle duty cycles as described in paragraph (n) of this section.

(k) Collect and measure emissions as described in 40 CFR part 1065. For hybrid powertrains with no plug-in capability, correct for the net energy change of the energy storage device as described in 40 CFR 1066.501. For PHEV powertrains, follow 40 CFR 1066.501 to determine End-of-Test for charge-depleting operation. You must get our approval in advance for your utility factor curve; we will approve it if you can show that you created it from sufficient in-use data of vehicles in the same application as the vehicles in which the PHEV powertrain will be installed.

(l) [Reserved]

(m) For each test point, validate the measured output speed with the corresponding reference values. If the range of reference speed is less than 10 percent of the mean reference speed, you need to meet only the standard error of estimate in Table 1 of this section. You may delete points when the vehicle is stopped. If your speed measurement is not at the location of $f_{\text{n,ref}}$, you may correct your measured speed by the constant speed ratio between the two locations. Apply cycle-validation criteria for each separate transient or highway cruise cycle based on the following parameters:

TABLE 1 OF § 1037.550—STATISTICAL CRITERIA FOR VALIDATING DUTY CYCLES

Parameter [a]	Speed control
Slope, a_1	$0.990 \le a_1 \le 1.010$.
Absolute value of intercept, $\lvert a_0 \rvert$.	≤2.0% of maximum v_{ref} speed.
Standard error of estimate, *SEE*.	≤2.0% of maximum v_{ref} speed.
Coefficient of determination, r^2.	≥0.990.

[a] Determine values for specified parameters as described in 40 CFR 1065.514(e) by comparing measured and reference values for $f_{\text{nref,dyno}}$.

(n) Determine the mass of fuel consumed at idle for the applicable duty cycles described in § 1037.510(a)(2) as follows:

(1) Measure fuel consumption with a fuel flow meter and report the mean fuel mass flow rate for each duty cycle as applicable, $\overline{\dot{m}}_{fuelidle}$.

(2) For measurements that do not involve measured fuel mass flow rate, calculate the fuel mass flow rate for each duty cycle, $\overline{\dot{m}}_{fuelidle}$, for each set of vehicle settings, as follows:

$$\overline{\dot{m}}_{fuelidle} = \frac{M_C}{w_{Cmeas}} \cdot \left(\overline{\dot{n}}_{exh} \cdot \frac{\overline{x}_{Ccombdry}}{1 + \overline{x}_{H2Oexhdry}} - \frac{\overline{\dot{m}}_{CO2DEF}}{M_{CO2}} \right)$$

Eq. 1037.550-7

Where:

M_C = molar mass of carbon.

w_{Cmeas} = carbon mass fraction of fuel (or mixture of test fuels) as determined in 40 CFR 1065.655(d), except that you may not use the default properties in Table 1 of 40 CFR 1065.655 to determine α, β, and w_C for liquid fuels.

$\overline{\dot{n}}_{exh}$ = the mean raw exhaust molar flow rate from which you measured emissions according to 40 CFR 1065.655.

$\bar{x}_{Ccombdry}$ = the mean concentration of carbon from fuel and any injected fluids in the exhaust per mole of dry exhaust.

$\bar{x}_{H2Oexhdry}$ = the mean concentration of H_2O in exhaust per mole of dry exhaust.

$\overline{\dot{m}}_{CO2DEF}$ = the mean CO_2 mass emission rate resulting from diesel exhaust fluid decomposition over the duty cycle as determined in 40 CFR 1036.535(b)(10). If your engine does not use diesel exhaust fluid, or if you choose not to perform this correction, set $\overline{\dot{m}}_{CO2DEF}$ equal to 0.

M_{CO2} = molar mass of carbon dioxide.

Example

M_C = 12.0107 g/mol

w_{Cmeas} = 0.867

$\overline{\dot{n}}_{exh}$ = 25.534 mol/s

$\bar{x}_{Ccombdry}$ = 2.805 − 10 ³ mol/mol

$\bar{x}_{H2Oexhdry}$ = 3.53 − 10 ² mol/mol

$\overline{\dot{m}}_{CO2DEF}$ = 0.0726 g/s

M_{CO2} = 44.0095

$$\overline{\dot{m}}_{fuelidle} = \frac{12.0107}{0.867} \cdot \left(25.534 \cdot \frac{2.805 \cdot 10^{-3}}{1 + 3.53 \cdot 10^{-2}} - \frac{0.0726}{44.0095} \right)$$

$\overline{\dot{m}}_{fuelidle}$ = 0.405 g/s = 1458.6 g/hr

(o) Use the results of powertrain testing to determine GEM inputs for the different simulated vehicle configurations as follows:

(1) Select fuel-consumption rates, $m_{fuel[cycle]}$, in g/cycle. In addition, declare a fuel mass consumption rate for each applicable idle duty cycle, $\overline{\dot{m}}_{fuelidle}$. These declared values may not be lower than any corresponding measured values determined in this section. If you use multiple measurement methods as allowed in 40 CFR 1036.540(d), follow 40 CFR 1036.540(g) regarding the use of direct and indirect fuel measurements and the carbon balance error verification. You may select any value that is at or above the corresponding measured value. These declared fuel-consumption rates, which serve as emission standards, represent collectively as the certified powertrain fuel map.

(2) Powertrain output speed per unit of vehicle speed.

(i) If the test is done with the torque measurement at the wheel hubs, set k_a to the axle ratio of the rear axle that was used in the test. If the vehicle does not have a drive axle, such as hybrid vehicles with direct electric drive, let k_a = 1.

$$\frac{f_{npowertrain}}{v_{powertrain}} = \frac{k_a}{2 \cdot \pi \cdot r_{[speed]}}$$

Eq. 1037.550-8

(ii) If the test is done with the torque measurement at the powertrain's output shaft that would connect to the transmission, follow 40 CFR 1036.540(e)(2) to determine powertrain output speed per unit vehicle speed.

(3) Positive work, $W_{[cycle]}$, over the duty cycle at the transmission output, wheel hubs, or the powertrain's output shaft that would connect to the transmission from the powertrain test.

(4) The following table illustrates the GEM data inputs corresponding to the different vehicle configurations:

Table 2 of § 1037.550 – Example test result output matrix for Heavy HDV

	Test 1	Test 2	Test 3	Test 4	Test 5	Test 6	Test 7	Test 8	Test 9
$M_{\text{fuel[cycle]}}$									
$\frac{f_{\text{npowertrain}}}{v_{\text{powertrain}}}$									
$W_{\text{[cycle]}}$									

(5) The engine idle speed, by taking the average engine speed measured during the engine test while the vehicle is not moving. Note that GEM has a flag to indicate when the vehicle is moving.

(p) Correct the measured or calculated fuel mass, m_{fuel}, and idle fuel mass flow rate, $\overline{\dot{m}}_{\text{fuelidle}}$ if applicable, for each test result to a mass-specific net energy content of a reference fuel as described in 40 CFR 1036.535(f), replacing $\overline{\dot{m}}_{\text{fuel}}$ with m_{fuel} where applicable in Eq. 1036.535–4.

(q) For each test run, record the engine speed and torque as defined in 40 CFR 1065.915(d)(5) with a minimum sampling frequency of 1 Hz. These engine speed and torque values represent a duty cycle that can be used for separate testing with an engine mounted on an engine dynamometer under § 1037.551, such as for a selective enforcement audit as described in § 1037.301.

■ 153. Amend § 1037.551 by revising paragraph (b) to read as follows:

§ 1037.551 Engine-based simulation of powertrain testing.

* * * * *

(b) Operate the engine over the applicable engine duty cycles corresponding to the vehicle cycles specified in § 1037.510(a)(2) for powertrain testing over the applicable vehicle simulations described in § 1037.550(i). Warm up the engine to prepare for the transient test or one of the highway cruise cycles by operating it one time over one of the simulations of the corresponding duty cycle. Warm up the engine to prepare for the idle test by operating it over a simulation of the 65-mi/hr highway cruise cycle for 600 seconds. Within 60 seconds after concluding the warm up cycle, start emission sampling while the engine operates over the duty cycle. You may perform any number of test runs directly in succession once the engine is warmed up. Perform cycle validation as described in 40 CFR 1065.514 for engine speed, torque, and power.

* * * * *

■ 154. Amend § 1037.560 by revising paragraphs (a), (b)(7), (c), (e), and (f) and adding paragraph (h) to read as follows:

§ 1037.560 Axle efficiency test.

* * * * *

(a) You may establish axle power loss maps based on testing any number of axle configurations within an axle family as specified in § 1037.232. You may share data across a family of axle configurations, as long as you test the axle configuration with the lowest efficiency from the axle family; this will generally involve testing the axle with the highest axle ratio. For vehicles with tandem drive axles, always test each drive axle separately. For tandem axles that can be disconnected, test both single-drive and tandem axle configurations. Alternatively, you may analytically derive power loss maps for untested configurations within the same family as defined in paragraph (h) of this section.

(b) * * *

(7) You may drain the gear oil following the break-in procedure and repeat the filling procedure described in paragraph (b)(4) of this section. We will follow your protocol for our testing.

(c) Measure input and output speed and torque as described in 40 CFR 1065.210(b), except that you must use a speed-measurement system that meets an accuracy of ±0.05% of point. Use torque transducers that meet an accuracy requirement of ±0.2% of the maximum axle input torque or output torque tested for loaded test points, and ±1.0 N·m for unloaded test points. Calibrate and verify measurement instruments according to 40 CFR part 1065, subpart C. Command speed and torque at a minimum of 10 Hz, and record all data, including bulk oil temperature, as 1 Hz mean values.

* * * * *

(e) Determine axle efficiency using the following procedure:

(1) Maintain ambient temperature between (15 and 35) °C throughout testing. Measure ambient temperature within 1.0 m of the axle assembly. Verify that critical axle settings (such as bearing preload, backlash, and oil sump level) are within specifications before and after testing.

(2) Maintain gear oil temperature at (81 to 83) °C. You may specify an alternative range with lower temperatures; if you measure temperature to the nearest 0.1 °C, the maximum allowable range is 3.0 °C. We will test your axle using the same temperature range you used for testing. Measure gear oil temperature at the drain of the sump. You may use an external gear oil conditioning system, as long as it does not affect measured values.

(3) Use good engineering judgment to warm up the axle by operating it until the gear oil is within the specified temperature range.

(4) Stabilize operation at each point in the test matrix for at least 10 seconds, then measure the input torque, output torque, and wheel speed for at least 10 seconds, recording the mean values for all three parameters. Calculate power loss as described in paragraph (f) of this section based on torque and speed values at each test point.

(5) Perform the map sequence described in paragraph (e)(4) of this section three times. Remove torque from the input shaft and allow the axle to

come to a full stop before each repeat measurement.

(6) You may need to perform additional testing based on a calculation of repeatability at a 95% confidence level. Make a separate repeatability calculation for the three data points at each operating condition in the test matrix. If the confidence limit is greater than 0.10% for loaded tests or greater than 0.05% for unloaded tests, perform another repeat of measurements at that operating condition and recalculate the repeatability for the whole set of test results. Continue testing until the repeatability is at or below the specified values for all operating conditions. Calculate a confidence limit representing the repeatability in establishing a 95% confidence level using the following equation:

$$Confidence\ Limit = \frac{1.96 \cdot \sigma_{\mathrm{Ploss}}}{\sqrt{N} \cdot P_{\max}} \cdot 100$$

Eq. 1037.560-1

Where:

σ_{Ploss} = standard deviation of power loss values at a given torque-speed setting (see 40 CFR 1065.602(c)).

N = number of repeat tests.

$P_{\max}$ = maximum output torque setting from the test matrix.

Example:

σ_{Ploss} = 165.0 W

N = 3

$P_{\max}$ = 314200 W

$$Confidence\ Limit = \frac{1.96 \cdot 165.0}{\sqrt{3} \cdot 314200} \cdot 100$$

Confidence Limit = 0.0594%

(7) Calculate mean input torque, $\bar{T}_{\mathrm{in}}$, mean output torque, $\bar{T}_{\mathrm{out}}$, and mean wheel rotational speed, $\bar{f}_{\mathrm{nwheel}}$, for each point in the test matrix for each test.

(f) Calculate the mean power loss, $\overline{P}_{\mathrm{loss}}$, at each operating condition in the test matrix as follows:

(1) $\overline{P}_{\mathrm{loss}}$ is the mean power loss, for each test, at each operating condition.

(2) For each test calculate the mean power loss, $\overline{P}_{\mathrm{loss}}$, as follows:

$$\overline{P}_{\mathrm{loss}} = \overline{T}_{\mathrm{in}} \cdot \overline{f}_{\mathrm{nwheel}} \cdot k_{\mathrm{a}} - \overline{T}_{\mathrm{out}} \cdot \overline{f}_{\mathrm{nwheel}}$$

Eq. 1037.560-2

Where:

$\bar{T}_{\mathrm{in}}$ = mean input torque.

$\bar{f}_{\mathrm{nwheel}}$ = mean wheel rotational speed.

k_{a} = drive axle ratio, expressed to at least the nearest 0.001.

$\bar{T}_{\mathrm{out}}$ = mean output torque. Let $\bar{T}_{\mathrm{out}}$ = 0 for all unloaded tests.

Example:

$\bar{T}_{\mathrm{in}}$ = 845.1 N·m $\bar{f}_{\mathrm{nwheel}}$ = 100 r/min = 10.472 rad/s

k_{a} = 3.731

$\bar{T}_{\mathrm{out}}$ = 3000 N·m

$\bar{P}_{\mathrm{loss}}$ = 845.1·10.472·3.731 − 3000·10.472

$\bar{P}_{\mathrm{loss,1}}$ = 1602.9 W = 1.6029 kW

$\bar{P}_{\mathrm{loss,2}}$ = 1601.9 W = 1.6019 kW

$\bar{P}_{\mathrm{loss,3}}$ = 1603.9 W = 1.6039 kW

$$\overline{\overline{P}}_{\mathrm{loss}} = \frac{1.6029 + 1.6019 + 1.6039}{3} = 1.6029\ \mathrm{kW}$$

* * * * *

(h) You may analytically derive axle power loss maps for untested configurations within the same family as follows:

(1) Test a minimum of three numeric ratios within the same family according to this section. Test each of these axles at the same speed and torque test points. Test the smallest and largest numeric axle ratios within the family and an axle ratio with a value that is near the arithmetic mean of the smallest and largest axle ratios.

(2) Perform a second order least-squares regression of the declared power loss values versus the axle ratio for each speed and torque test point in the power loss map.

(i) If the coefficient of the second order term is positive, then proceed to paragraph (c) of this section.

(ii) If the coefficent of the second order term is negative, either retest the axle(s) or increase the power loss of the largest and smallest axle ratio test points by the same multiplier until the second order term of the least-squares regression is positive.

(3) Use linear interpolation, between the smallest and largest axle ratios, for each speed and torque test point in the power loss map to determine power loss of untested axles for each test point.

■ 155. Amend § 1037.565 by revising paragraphs (c), (d), (e)(6), (7), (8), and (10), (f)(1), and (g) to read as follows:

§ 1037.565 Transmission efficiency test.

* * * * *

(c) Measure input and output shaft speed and torque as described in 40 CFR 1065.210(b), except that you must use a-speed measurement system that meets an accuracy of ±0.05% of point. Use torque transducers that meet an accuracy requirement of ±0.2% of the transmission's maximum rated input torque or output torque for the selected gear ratio, for loaded test points, and ±0.1% of the transmission's maximum rated input torque for unloaded test points. Calibrate and verify measurement instruments according to 40 CFR part 1065, subpart C. Command speed and torque at a minimum of 10 Hz, and record all data, including bulk oil temperature, at a minimum of 1 Hz mean values.

(d) The test matrix consists of transmission input shaft speeds and torque setpoints meeting the following specifications for each gear tested:

(1) Include transmission input shaft speeds at the maximum rated input shaft speed, 600 r/min, and three equally spaced intermediate speeds. The intermediate speed points may be adjusted to the nearest 50 or 100 r/min. You may increase the number of speed test points to improve the accuracy of the transmission power loss map, consistent with good engineering judgment.

(2) Include one loaded torque setpoint between 75% and 105% of the maximum transmission input torque and one unloaded (zero-torque) setpoint. You may test at any number of additional torque setpoints to improve accuracy. Note that GEM calculates power loss between tested or default values by linear interpolation.

(3) In the case of transmissions that automatically go into neutral when the vehicle is stopped, also perform tests at 600 r/min and 800 r/min with the transmission in neutral and the transmission output fixed at zero speed.

(4) Test all the gears at the transmission input shaft speeds and torque setpoints as described in this

paragraph (d). You may exclude the lower gears from testing; however, you must test all the gears above the highest excluded gear. If you choose this option, GEM will use default values for any gears not tested.

(e) * * *

(6) Operate the transmission at a selected gear and torque setpoint with the input shaft speed at one of the speed setpoints from paragraph (d) of this section for at least 10 seconds, then measure the speed and torque of the input and output shafts for at least 10 seconds. You may omit measurement of output shaft speeds if your transmission is configured in a way that does not allow slip. Calculate arithmetic mean values for all speed and torque values over each measurement period. Repeat this stabilization, measurement, and calculation for the other speed and torque setpoints from the test matrix in any sequence. Calculate power loss as described in paragraph (f) of this section based on torque and speed values at each test point.

(7) Repeat the procedure described in paragraph (e) for all gears, or for all gears down to a selected gear.

(8) Perform the test sequence described in paragraphs (e)(6) and (7) of this section three times. You may do this repeat testing at any given test point before you perform measurements for the whole test matrix. Remove torque from the transmission input shaft and bring the transmission to a complete stop before each repeat measurement.

* * * * *

(10) Calculate mean input shaft torque, $\bar{T}_{in}$, mean output shaft torque, $\bar{T}_{out}$, mean input shaft speed, $\bar{f}_{nin}$, and mean output shaft speed, $\bar{f}_{nout}$, for each point in the test matrix for each test.

(f) * * *

(1) $\bar{P}_{loss}$ is the mean power loss, for each test, at each operating condition.

* * * * *

(g) Create a table showing the mean power loss, $\overline{P}_{loss}$, corresponding to each mean transmission input speed and mean input torque for input into GEM. Also include mean power loss in neutral for each tested engines speed, if applicable. Express transmission input speed in r/min to one decimal place; express input torque in N·m to two decimal places; express power loss in kW to four decimal places. Select mean power loss values at or above the corresponding value calculated in paragraph (f) of this section. Use good engineering judgment to select values that will be at or above the mean power loss values for your production transmissions. Vehicle manufacturers will use these declared mean power loss values for certification.

■ 156. Add § 1037.570 to Subpart F to read as follows:

§ 1037.570 Determination of torque converter capacity factors.

This section describes a procedure for mapping torque converter capacity factors through a determination of torque converter input and output speeds and torques.

(a) You may establish torque converter capacity factors based on testing any torque converter. Alternatively, you may ask us to approve torque converter capacity factors for untested configurations that are analytically derived from tested configurations (see § 1037.235(h)).

(b) Prepare a torque converter for testing as follows:

(1) Select a torque converter with less than 500 hours of operation before testing.

(2) Mount the torque converter with transmission to the dynamometer in either a serial or parallel arrangement. If you choose a serial arrangement, you may test without the transmission.

(3) Add transmission oil according to the torque converter manufacturer's instructions. If the torque converter manufacturer specifies multiple transmission oils, select the one with the highest viscosity at operating temperature. You may use a lower-viscosity transmission oil if we approve that as critical emission-related maintenance under § 1037.125. Fill the transmission oil to a level that represents in-use operation. If you are testing the torque converter only, the input torque converter transmission oil flow rate and output pressure must be kept within the torque converter manufacturer's limits for the transmission type and maximum input speed. You may use an external transmission oil conditioning system, as long as it does not affect measured values.

(4) Install equipment for measuring the bulk temperature of the transmission oil in the oil sump or a similar location. If the torque converter is tested without the transmission, measure the oil temperature prior to where it enters the torque converter.

(5) If the torque converter is equipped with a lock, unlock it for all testing performed in this section. If equipped with slipping lockup clutch technology you may ask us to approve a different strategy if you have data showing that it represents better in-use operation.

(6) Break in the torque converter and transmission (if applicable) using good engineering judgment. Maintain transmission oil temperature at (87 to 93) °C. You may ask us to approve a different range of transmission oil temperatures if you have data showing that it better represents in-use operation.

(c) Measure input and output shaft speed and torque as described in 40 CFR 1065.210(b), except that you must use a speed measurement system that meets an accuracy of ±0.1% of point or 1 r/min, whichever is greater. Use torque transducers that meet an accuracy requirement of ±1.0% of the torque converter's maximum rated input torque or output torque for loaded and unloaded test points. Calibrate and verify measurement instruments according to 40 CFR part 1065, subpart C. Command speed and torque at a minimum of 10 Hz, and record all data, including bulk oil temperature, at a minimum of 1 Hz mean values.

(d) The test matrix consists of torque converter constant input shaft speeds or input shaft torque setpoints depending on the measurement option that you choose.

(1) To determine torque converter characteristics at constant input speed:

(i) Select an input rotational pump speed, $f_{npum,}$ fixed to a constant speed between (1000 and 2000) r/min.

(ii) Test the torque converter at multiple speed ratios, v, in the range of $v = 0$ to $v = 0.95$. Use a step width of 0.1 for the range of $v = 0$ to 0.6 and 0.05 for the range of $v = 0.6$ to 0.95.

(2) To determine torque converter characteristics at constant input torque:

(i) Set the input pump torque, $T_{pum,}$ to a positive level at $f_{npum} = 1000$ r/min with the output shaft of the torque converter locked in a non-rotating state (output rotational turbine speed, n_{tur}, = 0 r/min).

(ii) Test the torque converter at multiple speed ratios, v, in the range of $v = 0$ up to a usable value of f_{ntur} that covers the usable range of v with at least seven evenly distributed points. Use a step width of 0.1 for the range of $v = 0$ to 0.6 and 0.05 for the range of $v = 0.6$ to 0.95.

(e) Characterize the torque converter using the following procedure:

(1) Maintain ambient temperature between (15 and 35) °C throughout testing. Measure ambient temperature within 1.0 m of the torque converter.

(2) Maintain transmission oil temperature as described in paragraph (b)(6) of this section. You may use an external transmission oil conditioning system, as long as it does not affect measured values.

(3) Use good engineering judgment to warm up the torque converter according to the torque converter manufacturer's specifications.

(4) Operate the torque converter as follows:

(i) For testing at constant input speed, set the input rotational pump speed to the value chosen in paragraph (d)(1)(i) of this section.

(ii) For testing at constant input torque, set the input pump torque and pump speed to the values chosen in paragraph (d)(2)(i) of this section.

(5) Operate the torque converter at $v = 0$ for (5 to 60) seconds, then measure input pump torque, T_{pum}, output turbine torque, T_{tur}, input rotational pump speed, f_{npum}, output rotational turbine speed, f_{ntur}, and the torque converter inlet oil temperature, T_{TCin}, for (5 to 15) seconds. Calculate arithmetic mean values for all speed and torque values over each measurement period. Repeat this stabilization, measurement, and calculation for the other speed ratios from the test matrix in order of increasing speed ratio. Adjust the speed ratio by increasing the output rotational turbine speed. You may limit the upper speed ratio to a value below 0.95 if you have data that shows this better represents in-use operation. If you choose a lower this limit you must test at least seven evenly distributed points between $v = 0$ and your new upper speed ratio.

(6) Perform the test sequence described in paragraph (e)(5) of this section two times.

(7) Calculate mean input pump torque, $\bar{T}_{pum}$, mean output turbine torque, $\bar{T}_{tur}$, mean input rotational pump speed, f_{npum}, and mean output rotational turbine speed, $\bar{f}_{ntur}$, for each point in the test matrix for each of the repeat tests.

(8) The deviation between the mean of the two torque measurement sets cannot exceed ±5% of the average or ±1 N·m (whichever is greater) or the test mest be repeated.

(9) The deviation for the complete speed ratio series between the measured and averaged speed and torque values at the input shaft may not exceed ±5 rpm and ±5 N·m of the speed and torque set points for each measured operating point. If any of these ranges are exceed, the test must be repeated.

(f) Calculate the mean torque ratio, $\bar{\bar{\mu}}$, at each operating condition in the test matrix as follows:

(1) $\bar{\mu}$ is the mean torque ratio, for each of the tests, at each operating condition.

(2) For each test calculate the mean torque ratio, $\bar{\mu}$, as follows:

$$\bar{\mu} = \frac{\bar{T}_{tur}}{\bar{T}_{pum}}$$

Eq. 1037.570-1

Where:

$\bar{T}_{tur}$ = mean output turbine torque.
$\bar{T}_{pum}$ = mean input pump torque.

Example:

$$\bar{T}_{tur} = 332.4 \text{ N·m}$$

$$\bar{T}_{pum} = 150.8 \text{ N·m}$$

$$\bar{\mu}_{v=0,1} = \frac{332.4}{150.8}$$

$$\bar{\mu}_{v=0,1} = 2.20$$

$$\bar{\mu}_{v=0,2} = 2.22$$

$$\bar{\bar{\mu}}_{v=0} = \frac{2.2 + 2.22}{2} = 2.21$$

(g) Calculate the mean capacity factor, $\bar{\bar{K}}$, at each operating condition in the test matrix as follows:

(1) $\bar{K}$ is the mean capacity factor, for each of the tests, at each operating condition.

(2) For each test calculate the mean capacity factor, $\bar{K}$, as follows:

$$\bar{K} = \frac{\bar{f}_{npum}}{\sqrt{\bar{T}_{pum}}}$$

Eq. 1037.570-2

Where:

$\bar{f}_{npum}$ = mean input rotational pump speed.
$\bar{T}_{pum}$ = mean input pump torque.

Example:

$\bar{f}_{npum}$ = 1000.0 r/min
$\bar{T}_{pum}$ = 150.8 N·m

$$\bar{K} = \frac{1000.0}{\sqrt{150.8}}$$

$$\bar{K}_{v=0,1} = 81.43 \text{ r/(min·(N·m)}^{0.5}\text{)}$$

$$\bar{K}_{v=0,2} = 81.54 \text{ r/(min·(N·m)}^{0.5}\text{)}$$

$$\bar{\bar{K}}_{v=0} = \frac{81.43 + 81.54}{2} = 81.49 \text{ r/(min·(N·m)}^{0.5}\text{)}$$

(h) Create a table showing the mean torque ratio, $\bar{\bar{\mu}}$, and mean capacity factor, $\bar{\bar{K}}$, at each of corresponding speed ratios, v, that were tested, for input into GEM. Express mean torque ratio to two decimal places; express mean capacity factor in r/(min·(N·m)$^{0.5}$) to one decimal place; express speed ratio to two decimal places.

■ 157. Amend § 1037.621 by revising paragraph (g) introductory text to read as follows:

§ 1037.621 Delegated assembly.

* * * * *

(g) We may allow certifying vehicle manufacturers to authorize dealers or distributors to reconfigure/recalibrate vehicles after the vehicles have been introduced into commerce if they have not yet been delivered to the ultimate purchaser as follows:

* * * * *

■ 158. Amend § 1037.660 by revising paragraph (a)(2) and adding paragraph (b)(3)(ii) to read as follows:

§ 1037.660 Idle-reduction technologies.

* * * * *

(a) * * *

(2) *Neutral idle.* Phase 2 vehicles with hydrokinetic torque converters paired with automatic transmissions qualify for neutral-idle credit in GEM modeling if the transmission reduces torque equivalent to shifting into neutral throughout the interval during which the vehicle's brake pedal is depressed and the vehicle is at a zero-speed condition (beginning within two seconds of the vehicle reaching zero speed with the brake depressed). If a vehicle reduces torque partially but not enough to be equivalent to shifting to neutral, you may use the provisions of § 1037.610(g) to apply for an appropriate partial emission reduction; this may involve A to B testing with the powertrain test procedure in § 1037.550 or the spin-loss portion of the transmission efficiency test in § 1037.565.

* * * * *

(b) * * *

(3) * * *.

(ii) When the transmission is in reverse gear.

* * * * *

■ 159. Amend § 1037.665 by revising paragraph (c) to read as follows:

§ 1037.665 Production and in-use tractor testing.

* * * * *

(c) We may approve your request to perform alternative testing that will provide equivalent or better information compared to the specified testing. For example, we may allow you to provide CO_2 data from in-use operation or from manufacturer-run on-road testing as long as it allows for reasonable year-to-year comparisons and includes testing from non-prototype vehicles. We may also direct you to do less testing than we specify in this section.

* * * * *

■ 160. Amend § 1037.670 by revising the section heading and paragraphs (a) and (b) to read as follows:

§ 1037.670 Optional CO_2 emission standards for tractors at or above 120,000 pounds GCWR.

(a) You may certify tractors at or above 120,000 pounds GCWR to the following CO_2 standards instead of the Phase 2 CO_2 standards of § 1037.106:

TABLE 1 OF § 1037.670—OPTIONAL PHASE 2 CO_2 STANDARDS FOR TRACTORS ABOVE 120,000 POUNDS GCWR

[g/ton-mile] [a]

Subcategory	Model years 2021–2023	Model years 2024–2026	Model years 2026 and later
Heavy Class 8 Low-Roof Day Cab	53.5	50.8	48.9
Heavy Class 8 Low-Roof Sleeper Cab	47.1	44.5	42.4
Heavy Class 8 Mid-Roof Day Cab	55.6	52.8	50.8
Heavy Class 8 Mid-Roof Sleeper Cab	49.6	46.9	44.7
Heavy Class 8 High-Roof Day Cab	54.5	51.4	48.6
Heavy Class 8 High-Roof Sleeper Cab	47.1	44.2	41.0

[a] Note that these standards are not directly comparable to the standards for Heavy-Haul Tractors in § 1037.106 because GEM handles aerodynamic performance differently for the two sets of standards.

(b) Determine subcategories as described in § 1037.230 for tractors that are not heavy-haul tractors. For example, the subcategory for tractors that would otherwise be considered Class 8 low-roof day cabs would be Heavy Class 8 Low-Roof Day Cabs and would be identified as HC8_DC_LR for the GEM run.

* * * * *

■ 161. Amend § 1037.701 by revising paragraph (h) to read as follows:

§ 1037.701 General provisions.

* * * * *

(h) See § 1037.740 for special credit provisions that apply for credits generated under 40 CFR 86.1819–14(k)(7), 40 CFR 1036.615, or § 1037.615.

* * * * *

■ 162. Amend § 1037.705 by revising paragraph (c)(2) to read as follows:

§ 1037.705 Generating and calculating emission credits.

* * * * *

(c) * * *

(2) Exported vehicles. This exclusion applies even for exported vehicles that are certified under this part and labeled accordingly.

* * * * *

■ 163. Amend § 1037.745 by revising the section heading to read as follows.

§ 1037.745 End-of-year CO_2 credit deficits.

* * * * *

■ 164. Amend § 1037.801 by:

■ a. Revising the definitions for ''Compression-ignition'' and ''Electric vehicle'';

■ b. Adding a definition for ''Engine control module'' in alphabetical order;

■ c. Revising the definition for ''Heavy-duty vehicle;

■ d. Adding a definition for ''High-strength steel'' in alphabetical order;

■ e. Revising the definitions for ''Light-duty truck'', ''Low rolling resitance tire'', and ''Model year''; and

■ f. Adding a definition for ''Tonne'' in alphabetical order.

The revisions and additions read as follows:

§ 1037.801 Definitions.

* * * * *

Compression-ignition has the meaning given in § 1037.101.

* * * * *

Electric vehicle means a motor vehicle that does not include an engine, and is powered solely by an external source of electricity and/or solar power. Note that this does not include hybrid electric vehicles or fuel-cell vehicles that use a chemical fuel such as gasoline, diesel fuel, or hydrogen. Electric vehicles may also be referred to as all-electric vehicles to distinguish them from hybrid vehicles.

* * * * *

Engine control module has the meaning given in 40 CFR 1065.1001.

* * * * *

Heavy-duty vehicle means any trailer and any other motor vehicle that has a GVWR above 8,500 pounds. An

incomplete vehicle is also a heavy-duty vehicle if it has a curb weight above 6,000 pounds or a basic vehicle frontal area greater than 45 square feet.

* * * * *

High-strength steel has the meaning given in § 1037.520.

* * * * *

Light-duty truck means any motor vehicle that is not a heavy-duty vehicle, but is:

(1) Designed primarily for purposes of transportation of property or is a derivation of such a vehicle; or

(2) Designed primarily for transportation of persons and has a capacity of more than 12 persons; or

(3) Available with special features enabling off-street or off-highway operation and use.

* * * * *

Low rolling resistance tire means a tire on a vocational vehicle with a TRRL at or below of 7.7 kg/tonne, a steer tire on a tractor with a TRRL at or below 7.7 kg/tonne, a drive tire on a tractor with a TRRL at or below 8.1 kg/tonne, a tire on a non-box trailer with a TRRL at or below of 6.5 kg/tonne, or a tire on a box van with a TRRL at or below of 6.0 kg/tonne.

* * * * *

Model year means one of the following for compliance with this part 1037. Note that manufacturers may have other model year designations for the same vehicle for compliance with other requirements or for other purposes:

(1) For tractors and vocational vehicles with a date of manufacture on or after January 1, 2021, the vehicle's *model year* is the calendar year corresponding to the date of manufacture, except as follows:

(i) The vehicle's model year may be designated to be the year before the calendar year corresponding to the date of manufacture if the engine's model year is also from an earlier year. You may ask us to extend yor prior model year certificate to include such vehicles. Note that § 1037.601(a)(2) limits the extent to which vehicle manufacturers may install engines built in earlier calendar years.

(ii) The vehicle's model year may be designated to be the year after the calendar year corresponding to the date of manufacture. For example, a manufacturer may produce a new vehicle by installing the engine in December 2023 and designating it to be a model year 2024 vehicle.

(2) For trailers and for Phase 1 tractors and vocational vehicles with a date of manufacture before January 1, 2021, *model year* means the manufacturer's annual new model production period, except as restricted under this definition and 40 CFR part 85, subpart X. It must include January 1 of the calendar year for which the model year is named, may not begin before January 2 of the previous calendar year, and it must end by December 31 of the named calendar year. The model year may be set to match the calendar year corresponding to the date of manufacture.

(i) The manufacturer who holds the certificate of conformity for the vehicle must assign the model year based on the date when its manufacturing operations are completed relative to its annual model year period. In unusual circumstances where completion of your assembly is delayed, we may allow you to assign a model year one year earlier, provided it does not affect which regulatory requirements will apply.

(ii) Unless a vehicle is being shipped to a secondary vehicle manufacturer that will hold the certificate of conformity, the model year must be assigned prior to introduction of the vehicle into U.S. commerce. The certifying manufacturer must redesignate the model year if it does not complete its manufacturing operations within the originally identified model year. A vehicle introduced into U.S. commerce without a model year is deemed to have a model year equal to the calendar year of its introduction into U.S. commerce unless the certifying manufacturer assigns a later date.

* * * * *

Tonne means metric ton, which is exactly 1000 kg.

* * * * *

■ 165. Amend § 1037.805 by revising paragraphs (b), (c), (d), and (e) to read as follows:

§ 1037.805 Symbols, abbreviations, and acronyms.

* * * * *

(b) *Symbols for quantities.* This part 1037 uses the following symbols and units of measure for various quantities:

Symbol	Quantity	Unit	Unit symbol	Unit in terms of SI base units
A	vehicle frictional load	pound force or newton	lbf or N	$kg \cdot m \cdot s^{-2}$.
a	axle position regression coefficient.			
α	atomic hydrogen-to-carbon ratio	mole per mole	mol/mol	1.
α	axle position regression coefficient.			
α_0	intercept of air speed correction.			
α_1	slope of air speed correction.			
ag	acceleration of Earth's gravity	meters per second squared	m/s^2	$m \cdot s^{-2}$.
a_0	intercept of least squares regression.			
a_1	slope of least squares regression.			
B	vehicle load from drag and rolling resistance.	pound force per mile per hour or newton second per meter.	lbf/(mi/hr) or N·s/m	$kg \cdot s^{-1}$.
b	axle position regression coefficient.			
β	atomic oxygen-to-carbon ratio	mole per mole	mol/mol	1.
β	axle position regression coefficient.			
β_0	intercept of air direction correction.			
β_1	slope of air direction correction.			
C	vehicle-specific aerodynamic effects	pound force per mile per hour squared or newton-second squared per meter squared.	lbf/mph^2 or $N \cdot s^2/m^2$	$kg \cdot m^{-1}$.
c	axle position regression coefficient.			
c_i	axle test regression coefficients.			
C_i	constant.			
$\Delta C_d A$	differential drag area	meter squared	m^2	m^2.
$C_d A$	drag area	meter squared	m^2	m^2.
C_d	drag coefficient.			
CF	correction factor.			
C_{rr}	coefficient of rolling resistance	kilogram per metric ton	kg/tonne	10^{-3}.

Symbol	Quantity	Unit	Unit symbol	Unit in terms of SI base units
D	distance	miles or meters	mi or m	m.
e	mass-weighted emission result	grams/ton-mile	g/ton-mi	g/kg-km.
Eff	efficiency.			
F	adjustment factor.			
F	force	pound force or newton	lbf or N	$kg \cdot m \cdot s^{-2}$.
f_n	angular speed (shaft)	revolutions per minute	r/min	$\pi \cdot 30 \cdot s^{-1}$.
G	road grade	percent	%	10^{-2}.
g	gravitational acceleration	meters per second squared	m/s^2	$m \cdot s^{-2}$.
h	elevation or height	meters	m	m.
i	indexing variable.			
k_a	drive axle ratio			1.
k_d	transmission gear ratio.			
$k_{topgear}$	highest available transmission gear.			
L	load over axle	pound force or newton	lbf or N	$kg \cdot m \cdot s^{-2}$.
m	mass	pound mass or kilogram	lbm or kg	kg.
M	molar mass	gram per mole	g/mol	$10^{-3} \cdot kg \cdot mol^{-1}$.
M	vehicle mass	kilogram	kg	kg.
M_e	vehicle effective mass	kilogram	kg	kg.
$M_{rotating}$	inertial mass of rotating components	kilogram	kg	kg.
N	total number in series.			
n	number of tires.			
$\dot{n}$	amount of substance rate	mole per second	mol/s	$mol \cdot s^{-1}$.
P	power	kilowatt	kW	$10^3 \cdot m^2 \cdot kg \cdot s^{-3}$.
p	pressure	pascal	Pa	$kg \cdot m^{-1} \cdot s^{-2}$.
ρ	mass density	kilogram per cubic meter	kg/m^3	$kg \cdot m^{-3}$.
PL	payload	tons	ton	kg.
φ	direction	degrees	°	°.
ψ	direction	degrees	°	°.
r	tire radius	meter	m	m.
r^2	coefficient of determination.			
$Re_{\#}$	Reynolds number.			
SEE	standard estimate of error.			
σ	standard deviation.			
$TRPM$	tire revolutions per mile	revolutions per mile	r/mi.	
$TRRL$	tire rolling resistance level	kilogram per metric ton	kg/tonne	10^{-3}.
T	absolute temperature	kelvin	K	K.
T	Celsius temperature	degree Celsius	°C	K − 273.15.
T	torque (moment of force)	newton meter	N·m	$m^2 \cdot kg \cdot s^{-2}$.
t	time	hour or second	hr or s	s.
Δt	time interval, period, 1/frequency	second	s	s.
UF	utility factor.			
v	speed	miles per hour or meters per second	mi/hr or m/s	$m \cdot s^{-1}$.
w	weighting factor.			
w	wind speed	miles per hour	mi/hr	$m \cdot s^{-1}$.
W	work	kilowatt-hour	kW·hr	$3.6 \cdot m^2 \cdot kg \cdot s^{-1}$.
w_C	carbon mass fraction	gram/gram	g/g	1.
WR	weight reduction	pound mass	lbm	kg.
x	amount of substance mole fraction	mole per mole	mol/mol	1.

(c) *Superscripts.* This part uses the following superscripts for modifying quantity symbols:

Superscript	Meaning
overbar (such as $\bar{y}$)	arithmetic mean.
double overbar (such as $\bar{\bar{y}}$).	arithmetic mean of arithmetic mean.
overdot (such as $\dot{y}$)	quantity per unit time.

(d) *Subscripts.* This part uses the following subscripts for modifying quantity symbols:

Subscript	Meaning
±6	±6° yaw angle sweep.
A	A speed.
air	air.
aero	aerodynamic.
alt	alternative.
act	actual or measured condition.
air	air.
axle	axle.
B	B speed.
brake	brake.
C	C speed.
Ccombdry	carbon from fuel per mole of dry exhaust.

Subscript	Meaning
CD	charge-depleting.
circuit	circuit.
CO2DEF	CO_2 resulting from diesel exhaust fluid decomposition.
CO2PTO	CO_2 emissions for PTO cycle.
coastdown	coastdown.
comp	composite.
CS	charge-sustaining.
cycle	test cycle.
drive	drive axle.
drive-idle	idle with the transmission in drive.
driver	driver.
dyno	dynamometer.
effective	effective.
end	end.
eng	engine.
event	event.
fuel	fuel.
full	full.
grade	grade.
H2Oexhaustdry	H_2O in exhaust per mole of exhaust.
hi	high.
i	an individual of a series.
idle	idle.
in	inlet.
inc	increment.
lo	low.
loss	loss.
max	maximum.
meas	measured quantity.
med	median.
min	minimum.
moving	moving.
out	outlet.
P	power.
pair	pair of speed segments.
parked-idle	idle with the transmission in park.
partial	partial.
ploss	power loss.
plug-in	plug-in hybrid electric vehicle.
powertrain	powertrain.
PTO	power take-off.
rated	rated speed.
record	record.
ref	reference quantity.
RL	road load.
rotating	rotating.
seg	segment.
speed	speed.
spin	axle spin loss.
start	start.
steer	steer axle.
t	tire.
test	test.
th	theoretical.
total	total.
trac	traction.
trac10	traction force at 10 mi/hr.
trailer	trailer axle.
transient	transient.
TRR	tire rolling resistance.
urea	urea.
veh	vehicle.
w	wind.
wa	wind average.
yaw	yaw angle.
ys	yaw sweep.
zero	zero quantity.

(e) *Other acronyms and abbreviations.* This part uses the following additional abbreviations and acronyms:

ABT	averaging, banking, and trading.
AECD	auxiliary emission control device.
AES	automatic engine shutdown.
APU	auxiliary power unit.
CD	charge-depleting.
CFD	computational fluid dynamics.
CFR	Code of Federal Regulations.
CITT	curb idle transmission torque.
CS	charge-sustaining.
DOT	Department of Transportation.
ECM	engine control module.
EPA	Environmental Protection Agency.
FE	fuel economy.
FEL	Family Emission Limit.
GAWR	gross axle weight rating.
GCWR	gross combination weight rating.
GEM	greenhouse gas emission model.
GVWR	gross vehicle weight rating.
Heavy HDV	Heavy heavy-duty vehicle (see § 1037.140).
HVAC	heating, ventilating, and air conditioning.
ISO	International Organization for Standardization.
Light HDV	Light heavy-duty vehicle (see § 1037.140).
Medium HDV	Medium heavy-duty vehicle (see § 1037.140).
NARA	National Archives and Records Administration.
NHTSA	National Highway Transportation Safety Administration.
PHEV	plug-in hybrid electric vehicle.
PTO	power take-off.
RESS	rechargeable energy storage system.
rpm	revolutions per minute.
SAE	Society of Automotive Engineers.
SEE	standard error of estimate.
SKU	stock-keeping unit.
TRPM	tire revolutions per mile.
TRRL	tire rolling resistance level.
U.S.C	United States Code.
VSL	vehicle speed limiter.

* * * * *

■ 166. Amend § 1037.810 by revising paragraphs (a) and (c)(2) to read as follows:

§ 1037.810 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Environmental Protection Agency must publish a document in the **Federal Register** and the material must be available to the public. All approved material is available for inspection at EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue NW, Washington, DC 20004, *www.epa.gov/dockets*, (202) 202–1744, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email *fedreg.legal@nara.gov*, or go to *www.archives.gov/federal-register/cfr/ibr-locations.html.*

* * * * *

(c) * * *

(2) Greenhouse gas Emissions Model (GEM) Phase 2, Version 3.5, November 2019; IBR approved for §§ 1037.520 and 1037.550(b). The computer code for this model is available as noted in paragraph (a) of this section. A working version of this software is also available for download at *https://www.epa.gov/regulations-emissions-vehicles-and-engines/greenhouse-gas-emissions-model-gem-medium-and-heavy-duty.*

* * * * *

■ 167. Revise Appendix IV to Part 1037 to read as follows:

Appendix IV to Part 1037—Heavy-Duty Grade Profile for Phase 2 Steady-State Test Cycles

The following table identifies a grade profile for operating vehicles over the highway cruise cycles specified in subpart F of this part. Determine intermediate values by linear interpolation.

Distance (m)	Grade (%)
0	0
402	0
804	0.5
1206	0
1210	0
1222	−0.1
1234	0
1244	0
1294	0.36
1344	0
1354	0
1408	−0.28
1504	−1.04
1600	−0.28
1654	0
1666	0
1792	0.39
1860	0.66
1936	1.15
2098	2.44
2260	1.15
2336	0.66
2404	0.39
2530	0
2548	0
2732	−0.46
2800	−0.69
2880	−1.08
2948	−1.53
3100	−2.75
3252	−1.53
3320	−1.08
3400	−0.69
3468	−0.46
3652	0
3666	0
3742	0.35
3818	0.9
3904	1.59
3990	0.9
4066	0.35
4142	0
4158	0
4224	−0.1

Distance (m)	Grade (%)
4496	−0.69
4578	−0.97
4664	−1.36
4732	−1.78
4916	−3.23
5100	−1.78
5168	−1.36
5254	−0.97
5336	−0.69
5608	−0.1
5674	0
5724	0
5808	0.1
5900	0.17
6122	0.38
6314	0.58
6454	0.77
6628	1.09
6714	1.29
6838	1.66
6964	2.14
7040	2.57
7112	3
7164	3.27
7202	3.69
7292	5.01
7382	3.69
7420	3.27
7472	3
7544	2.57
7620	2.14
7746	1.66
7870	1.29
7956	1.09
8130	0.77
8270	0.58
8462	0.38
8684	0.17
8776	0.1
8860	0
8904	0
9010	−0.38
9070	−0.69
9254	−2.13
9438	−0.69
9498	−0.38
9604	0
9616	0
9664	0.26
9718	0.7
9772	0.26
9820	0
9830	0
9898	−0.34
10024	−1.33
10150	−0.34
10218	0
10228	0
10316	0.37
10370	0.7
10514	1.85
10658	0.7
10712	0.37
10800	0
10812	0
10900	−0.37
10954	−0.7
11098	−1.85
11242	−0.7
11296	−0.37
11384	0
11394	0
11462	0.34
11588	1.33
11714	0.34
11782	0
11792	0
11840	−0.26
11894	−0.7
11948	−0.26
11996	0
12008	0
12114	0.38
12174	0.69
12358	2.13
12542	0.69
12602	0.38
12708	0
12752	0
12836	−0.1
12928	−0.17
13150	−0.38
13342	−0.58
13482	−0.77
13656	−1.09
13742	−1.29
13866	−1.66
13992	−2.14
14068	−2.57
14140	−3
14192	−3.27
14230	−3.69
14320	−5.01
14410	−3.69
14448	−3.27
14500	−3
14572	−2.57
14648	−2.14
14774	−1.66
14898	−1.29
14984	−1.09
15158	−0.77
15298	−0.58
15490	−0.38
15712	−0.17
15804	−0.1
15888	0
15938	0
16004	0.1
16276	0.69
16358	0.97
16444	1.36
16512	1.78
16696	3.23
16880	1.78
16948	1.36
17034	0.97
17116	0.69
17388	0.1
17454	0
17470	0
17546	−0.35
17622	−0.9
17708	−1.59
17794	−0.9
17870	−0.35
17946	0
17960	0
18144	0.46
18212	0.69
18292	1.08
18360	1.53
18512	2.75
18664	1.53
18732	1.08
18812	0.69
18880	0.46
19064	0
19082	0
19208	−0.39
19276	−0.66
19352	−1.15
19514	−2.44
19676	−1.15
19752	−0.66
19820	−0.39
19946	0
19958	0
20012	0.28
20108	1.04
20204	0.28
20258	0
20268	0
20318	−0.36
20368	0
20378	0
20390	0.1
20402	0
20406	0
20808	−0.5
21210	0
21612	0

PART 1039—CONTROL OF EMISSIONS FROM NEW AND IN-USE NONROAD COMPRESSION-IGNITION ENGINES

■ 168. The authority statement for part 1039 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 169. Amend § 1039.1 by revising paragraphs (b)(3) and (c) to read as follows:

§ 1039.1 Does this part apply for my engines?

* * * * *

(b) * * *

(3) Engines originally meeting Tier 1, Tier 2, or Tier 3 standards as specified in Appendix I of this part remain subject to those standards. This includes uncertified engines that meet standards under 40 CFR 1068.265. Affected engines remain subject to recall provisions as specified in 40 CFR part 1068, subpart F, throughout the useful life corresponding to the original certification. Also, tampering and defeat – device prohibitions continue to apply for those engines as specified in 40 CFR 1068.101.

* * * * *

(c) The definition of nonroad engine in 40 CFR 1068.30 excludes certain engines used in stationary applications. These engines may be required by 40 CFR part 60, subpart IIII, to comply with some of the provisions of this part 1039; otherwise, these engines are only required to comply with the requirements in § 1039.20. In addition, the prohibitions in 40 CFR 1068.101 restrict the use of stationary engines for

nonstationary purposes unless they are certified to the same standards that would apply to certain nonroad engines for the same model year.

* * * * *

■ 170. Amend § 1039.20 by revising paragraph (a) introductory text, paragraphs (b)(2), (4), and (c) to read as follows:

§ 1039.20 What requirements from this part apply to excluded stationary engines?

* * * * *

(a) You must add a permanent label or tag to each new engine you produce or import that is excluded under § 1039.1(c) as a stationary engine and is not required by 40 CFR part 60, subpart IIII, to meet the requirements described in this part 1039, or the requirements described in 40 CFR part 1042, that are equivalent to the requirements applicable to marine or land-based nonroad engines for the same model year. To meet labeling requirements, you must do the following things:

* * * * *

(b) * * *

(2) Include your full corporate name and trademark.

* * * * *

(4) State: ''THIS ENGINE IS EXEMPTED FROM NONROAD CERTIFICATION REQUIREMENTS AS A ''STATIONARY ENGINE.'' INSTALLING OR USING THIS ENGINE IN ANY OTHER APPLICATION MAY BE A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY.''

(c) Stationary engines required by 40 CFR part 60, subpart IIII, to meet the requirements described in this part 1039 or 40 CFR part 1042, must meet the labeling requirements of 40 CFR 60.4210.

■ 171. Amend § 1039.101 by revising the introductory text and paragraph (b) to read as follows:

§ 1039.101 What exhaust emission standards must my engines meet after the 2014 model year?

The exhaust emission standards of this section apply after the 2014 model year. Certain of these standards also apply for model year 2014 and earlier. This section presents the full set of emission standards that apply after all the transition and phase-in provisions of § 1039.102 and § 1039.104 expire. Section 1039.105 specifies smoke standards.

* * * * *

(b) *Emission standards for steady-state testing.* Steady-state exhaust emissions from your engines may not exceed the applicable emission standards in Table 1 of this section. Measure emissions using the applicable steady-state test procedures described in subpart F of this part.

TABLE 1 OF § 1039.101—TIER 4 EXHAUST EMISSION STANDARDS AFTER THE 2014 MODEL YEAR, g/kW-hr [1]

Maximum engine power	Application	PM	NO_X	NMHC	NO_X + NMHC	CO
kW < 19	All	[2] 0.40			7.5	[3] 6.6
19 ≤ kW < 56	All	0.03			4.7	[4] 5.0
56 ≤ kW < 130	All	0.02	0.40	0.19		5.0
130 ≤ kW ≤ 560	All	0.02	0.40	0.19		3.5
kW > 560	Generator sets	0.03	0.67	0.19		3.5
kW > 560	All except generator sets	0.04	3.5	0.19		3.5

[1] Note that some of these standards also apply for 2014 and earlier model years. This table presents the full set of emission standards that apply after all the transition and phase-in provisions of § 1039.102 expire.
[2] See paragraph (c) of this section for provisions related to an optional PM standard for certain engines below 8 kW.
[3] The CO standard is 8.0 g/kW-hr for engines below 8 kW.
[4] The CO standard is 5.5 g/kW-hr for engines below 37 kW.

* * * * *

■ 172. Amend § 1039.102 by:

■ a. Revising the introductory text and paragraph (a)(2);

■ b. Revising Tables 1, 3, and 6 in paragraph (b); and

■ c. Revising paragraphs (d)(1), (e)(3), (g)(1)(iv), and (g)(2).

The revisions read as follows:

§ 1039.102 What exhaust emission standards and phase-in allowances apply for my engines in model year 2014 and earlier?

The exhaust emission standards of this section apply for 2014 and earlier model years. See § 1039.101 for exhaust emission standards that apply to later model years.

(a) * * *

(2) The transient standards in this section for gaseous pollutants do not apply to phase-out engines that you certify to the same numerical standards (and FELs if the engines are certified using ABT) for gaseous pollutants as you certified under the Tier 3 requirements identified in Appendix I of this part. However, except as specified by paragraph (a)(1) of this section, the transient PM emission standards apply to these engines.

(b) * * *

TABLE 1 OF § 1039.102—TIER 4 EXHAUST EMISSION STANDARDS (g/kW-hr): kW <19

Maximum engine power	Model years	PM	NO_X + NMHC	CO
kW < 8	2008–2014	[1] 0.40	7.5	8.0
8 ≤ kW < 19	2008–2014	0.40	7.5	6.6

[1] For engines that qualify for the special provisions in § 1039.101(c), you may delay certifying to the standards in this part 1039 until 2010. In 2009 and earlier model years, these engines must instead meet the applicable Tier 2 standards and other requirements identified in Appendix I of this part. Starting in 2010, these engines must meet a PM standard of 0.60 g/kW-hr, as described in § 1039.101(c). Engines certified to the 0.60 g/kWhr PM standard may not generate ABT credits.

* * * * *

TABLE 3 OF § 1039.102—INTERIM TIER 4 EXHAUST EMISSION STANDARDS (g/kW-hr): 37 > kW < 56

Option [1]	Model years	PM	NO_X + NMHC	CO
#1	2008–2012	0.30	4.7	5.0
#2	2012	0.03	4.7	5.0
All	2013–2014	0.03	4.7	5.0

[1] You may certify engines to the Option #1 or Option #2 standards starting in the listed model year. Under Option #1, all engines at or above 37 kW and below 56 kW produced before the 2013 model year must meet the applicable Option #1 standards in this table. These engines are considered to be ''Option #1 engines.'' Under Option #2, all these engines produced before the 2012 model year must meet the applicable standards identified in Appendix I of this part. Engines certified to the Option #2 standards in model year 2012 are considered ''Option #2 engines.''

* * * * *

TABLE 6 OF § 1039.102—INTERIM TIER 4 EXHAUST EMISSION STANDARDS (g/kW-hr): 130 > kW > 560

Model years	Phase-in option	PM	NO_X	NMHC	NO_X + NMHC	CO
2011–2013	Phase-in	0.02	0.40	0.19		3.5
	Phase-out	0.02			4.0	3.5
2014	All engines	0.02	0.40	0.19		3.5

* * * * *

(d) * * *

(1) For model years 2012 through 2014, you may use banked NO_X + NMHC credits from any Tier 2 engine at or above 37 kW certified under the standards identified in Appendix I of this part to meet the NO_X phase-in standards or the NO_X + NMHC phase-out standards under paragraphs (b) and (c) of this section, subject to the additional ABT provisions in § 1039.740.

* * * * *

(e) * * *

(3) You use NO_X + NMHC emission credits to certify an engine family to the alternate NO_X + NMHC standards in this paragraph (e)(3) instead of the otherwise applicable alternate NO_X and NMHC standards. Calculate the alternate NO_X + NMHC standard by adding 0.1 g/kW-hr to the numerical value of the applicable alternate NO_X standard of paragraph (e)(1) or (2) of this section. Engines certified to the NO_X + NMHC standards of this paragraph (e)(3) may not generate emission credits. The FEL caps for engine families certified under this paragraph (e)(3) are the previously applicable NO_X + NMHC standards identified in Appendix I of this part (generally the Tier 3 standards).

* * * * *

(g) * * *

(1) * * *

(iv) Gaseous pollutants for phase-out engines that you certify to the same numerical standards and FELs for gaseous pollutants to which you certified under the Tier 3 requirements identified in Appendix I of this part. However, the NTE standards for PM apply to these engines.

(2) *Interim FEL caps.* As described in § 1039.101(d), you may participate in the ABT program in subpart H of this part by certifying engines to FELs for PM, NO_X, or NO_X + NMHC instead of the standards in Tables 1 through 7 of this section for the model years shown. The FEL caps listed in the following table apply instead of the FEL caps in § 1039.101(d)(1), except as allowed by § 1039.104(g):

TABLE 8 OF § 1039.102—INTERIM TIER 4 FEL CAPS, g/kW-hr

Maximum engine power	Phase-in option	Model years [1]	PM	NO_X	NO_X + NMHC
kW < 19		2008–2014	0.80		[2] 9.5
19 ≤ kW < 37		2008–2012	0.60		9.5
37 ≤ kW < 56		[3] 2008–2012	0.40		7.5
56 ≤ kW < 130	phase-in	2012–2013	0.04	0.80	
56 ≤ kW < 130	phase-out	2012–2013	0.04		[4] 6.6
130 ≤ kW ≤ 560	phase-in	2011–2013	0.04	0.80	
130 ≤ kW ≤ 560	phase-out	2011–2013	0.04		[5] 6.4
kW > 560		2011–2014	0.20	6.2	

[1] For model years before 2015 where this table does not specify FEL caps, apply the FEL caps shown in § 1039.101.
[2] For engines below 8 kW, the FEL cap is 10.5 g/kW-hr for NO_X + NMHC emissions.
[3] For manufacturers certifying engines to the standards of this part 1039 in 2012 under Option #2 of Table 3 of § 1039.102, the FEL caps for 37–56 kW engines in the 19–56 kW category of Table 2 of § 1039.101 apply for model year 2012 and later; see Appendix I of this part for provisions that apply to earlier model years.
[4] For engines below 75 kW, the FEL cap is 7.5 g/kW-hr for NO_X + NMHC emissions.
[5] For engines below 225 kW, the FEL cap is 6.6 g/kW-hr for NO_X + NMHC emissions.

■ 173. Amend § 1039.104 by revising paragraphs (c)(1), (c)(2)(ii), (c)(4), and (g)(4) to read as follows:

§ 1039.104 Are there interim provisions that apply only for a limited time?

* * * * *

(c) * * *

(1) You may delay complying with certain otherwise applicable Tier 4 emission standards and requirements as described in the following table:

If your engine's maximum power is . . .	You may delay meeting . . .	Until model year . . .	Before that model year the engine must comply with . . .
kW < 19	The standards and requirements of this part	2011	The standards and requirements described in Appendix I of this part.
19 ≤ kW < 37	The Tier 4 standards and requirements of this part that would otherwise be applicable in model year 2013.	2016	The Tier 4 standards and requirements that apply for model year 2008.
37 ≤ kW < 56	See paragraph (c)(2) of this section for special provisions that apply for engines in this power category.		
56 ≤ kW < 130	The standards and requirements of this part	2015	The standards and requirements described in Appendix I of this part.

(2) * * *

(ii) If you do not choose to comply with paragraph (c)(2)(i) of this section, you may continue to comply with the standards and requirements described in Appendix I of this part for model years through 2012, but you must begin complying in 2013 with Tier 4 standards and requirements specified in Table 3 of § 1039.102 for model years 2013 and later.

* * * * *

(4) For engines not in the 19–56 kW power category, if you delay compliance with any standards under this paragraph (c), you must do all the following things for the model years when you are delaying compliance with the otherwise applicable standards:

(i) Produce engines that meet all the emission standards identified in Appendix I of this part and other requirements applicable for that model year, except as noted in this paragraph (c).

(ii) Meet the labeling requirements that apply for certified engines, but use the following alternative compliance statement: ''THIS ENGINE COMPLIES WITH U.S. EPA REGULATIONS FOR [CURRENT MODEL YEAR] NONROAD COMPRESSION-IGNITION ENGINES UNDER 40 CFR 1039.104(c).''

* * * * *

(g) * * *

(4) Do not apply TCAFs to gaseous emissions for phase-out engines that you certify to the same numerical standards (and FELs if the engines are certified using ABT) for gaseous pollutants as you certified under the Tier 3 requirements identified in Appendix I of this part.

TABLE 1 OF § 1039.104—ALTERNATE FEL CAPS

Maximum engine power	PM FEL cap, g/kW-hr	Model years for the alternate PM FEL cap	NO_X FEL cap, g/kW-hr [1]	Model years for the alternate NO_X FEL cap
19 ≤ kW < 56	0.30	[2] 2012–2015		
56 ≤ kW < 130 [3]	0.30	2012–2015	3.8	[4] 2012–2015
130 ≤ kW ≤ 560	0.20	2011–2014	3.8	[5] 2011–2014
kW > 560 [6]	0.10	2015–2018	3.5	2015–2018

[1] The FEL cap for engines demonstrating compliance with a NO_X + NMHC standard is equal to the previously applicable NO_X + NMHC standard specified in Appendix I of this part (generally the Tier 3 standards).

[2] For manufacturers certifying engines under Option #1 of Table 3 of § 1039.102, these alternate FEL caps apply to all 19–56 kW engines for model years from 2013 through 2016 instead of the years indicated in this table. For manufacturers certifying engines under Option #2 of Table 3 of § 1039.102, these alternate FEL caps do not apply to 19–37 kW engines except in model years 2013 to 2015.

[3] For engines below 75 kW, the FEL caps are 0.40 g/kW-hr for PM emissions and 4.4 g/kW-hr for NO_X emissions.

[4] For manufacturers certifying engines in this power category using a percentage phase-in/phase-out approach instead of the alternate NO_X standards of § 1039.102(e)(1), the alternate NO_X FEL cap in the table applies only in the 2014–2015 model years if certifying under § 1039.102(d)(1), and only in the 2015 model year if certifying under § 1039.102(d)(2).

[5] For manufacturers certifying engines in this power category using the percentage phase-in/phase-out approach instead of the alternate NO_X standard of § 1039.102(e)(2), the alternate NO_X FEL cap in the table applies only for the 2014 model year.

[6] For engines above 560 kW, the provision for alternate NO_X FEL caps is limited to generator-set engines.

* * * * *

■ 174. Amend § 1039.135 by revising paragraph (e) introductory text to read as follows:

§ 1039.135 How must I label and identify the engines I produce?

* * * * *

(e) For model year 2019 and earlier, create a separate label with the statement: ''ULTRA LOW SULFUR FUEL ONLY''. Permanently attach this label to the equipment near the fuel inlet or, if you do not manufacture the equipment, take one of the following steps to ensure that the equipment will be properly labeled:

* * * * *

■ 175. Amend § 1039.205 by adding paragraph (c) to read as follows:

§ 1039.205 What must I include in my application?

* * * * *

(c) If your engines are equipped with an engine diagnostic system, explain how it works, describing especially the engine conditions (with the corresponding diagnostic trouble codes) that cause the malfunction-indicator light to go on and the design features that minimize the potential for operation without reductant.

* * * * *

■ 176. Amend § 1039.225 by revising paragraph (e) to read as follows:

§ 1039.225 How do I amend my application for certification?

* * * * *

(e) The amended application applies starting with the date you submit the amended application, as follows:

(1) For engine families already covered by a certificate of conformity, you may start producing a new or modified engine configuration anytime after you send us your amended

application and before we make a decision under paragraph (d) of this section. However, if we determine that the affected engines do not meet applicable requirements, we will notify you to cease production of the engines and may require you to recall the engines at no expense to the owner. Choosing to produce engines under this paragraph (e) is deemed to be consent to recall all engines that we determine do not meet applicable emission standards or other requirements and to remedy the nonconformity at no expense to the owner. If you do not provide information required under paragraph (c) of this section within 30 days after we request it, you must stop producing the new or modified engines.

(2) If you amend your application to make the amended application correct and complete, these changes do not apply retroactively. Also, if we determine that your amended application is not correct and complete, or otherwise does not conform to the regulation, we will notify you and describe how to address the error.

* * * * *

■ 177. Amend § 1039.245 by revising paragraph (a) to read as follows:

§ 1039.245 How do I determine deterioration factors from exhaust durability testing?

* * * * *

(a) You may ask us to approve deterioration factors for an engine family with established technology based on engineering analysis instead of testing. Engines certified to a NO_X + NMHC standard or FEL greater than the Tier 3 NO_X + NMHC standard described in Appendix I of this part are considered to rely on established technology for gaseous emission control, except that this does not include any engines that use exhaust-gas recirculation or aftertreatment. In most cases, technologies used to meet the Tier 1 and Tier 2 emission standards would be considered to be established technology.

* * * * *

■ 178. Revise § 1039.255 to read as follows:

§ 1039.255 What decisions may EPA make regarding a certificate of conformity?

(a) If we determine an application is complete and shows that the engine family meets all the requirements of this part and the Act, we will issue a certificate of conformity for the engine family for that model year. We may make the approval subject to additional conditions.

(b) We may deny an application for certification if we determine that an engine family fails to comply with emission standards or other requirements of this part or the Clean Air Act. We will base our decision on all available information. If we deny an application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke a certificate of conformity if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(3) Cause any test data to become inaccurate.

(4) Deny us from completing authorized activities (see 40 CFR 1068.20). This includes a failure to provide reasonable assistance.

(5) Produce engines for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend an application to include all engines being produced.

(7) Take any action that otherwise circumvents the intent of the Act or this part, with respect to an engine family.

(d) We may void a certificate of conformity for an engine family if you fail to keep records, send reports, or give us information as required under this part or the Act. Note that these are also violations of 40 CFR 1068.101(a)(2).

(e) We may void a certificate of conformity for an engine family if we find that you intentionally submitted false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(f) If we deny an application or suspend, revoke, or void a certificate, you may ask for a hearing (see § 1039.820).

■ 179. Amend § 1039.601 by revising paragraph (b) to read as follows:

§ 1039.601 What compliance provisions apply?

* * * * *

(b) Subpart C of this part describes how to test and certify dual-fuel and flexible-fuel engines. Some multi-fuel engines may not fit either of those defined terms. For such engines, we will determine whether it is most appropriate to treat them as single-fuel engines, dual-fuel engines, or flexible-fuel engines based on the range of possible and expected fuel mixtures. For example, an engine might burn natural gas but initiate combustion with a pilot injection of diesel fuel. If the engine is designed to operate with a single fueling algorithm (*i.e.,* fueling rates are fixed at a given engine speed and load condition), we would generally treat it as a single-fuel engine. In this context, the combination of diesel fuel and natural gas would be its own fuel type. If the engine is designed to also operate on diesel fuel alone, we would generally treat it as a dual-fuel engine. If the engine is designed to operate on varying mixtures of the two fuels, we would generally treat it as a flexible-fuel engine. To the extent that requirements vary for the different fuels or fuel mixtures, we may apply the more stringent requirements.

■ 180. Amend § 1039.620 by revising paragraph (b) to read as follows:

§ 1039.620 What are the provisions for exempting engines used solely for competition?

* * * * *

(b) The definition of nonroad engine in 40 CFR 1068.30 excludes engines used solely for competition. These engines are not required to comply with this part 1039, but 40 CFR 1068.101 prohibits the use of competition engines for noncompetition purposes.

* * * * *

■ 181. Amend § 1039.625 by revising the introductory text, paragraph (d)(4) introductory text, paragraphs (e)(1), (e)(3), and (g)(1)(vi), paragraph (j) introductory text, and paragraph (j)(1) to read as follows:

§ 1039.625 What requirements apply under the program for equipment-manufacturer flexibility?

The provisions of this section allow equipment manufacturers to produce equipment with engines that are subject to less stringent emission standards after the Tier 4 emission standards begin to apply. To be eligible to use these provisions, you must follow all the instructions in this section. *See* § 1039.626 for requirements that apply specifically to companies that manufacture equipment outside the United States and to companies that import such equipment without manufacturing it. Engines and equipment you produce under this section are exempt from the prohibitions in 40 CFR 1068.101(a)(1), subject to the provisions of this section.

* * * * *

(d) * * *

(4) You may start using the allowances under this section for engines that are not yet subject to Tier 4 standards, as long as the seven-year period for using allowances under the

Tier 2 or Tier 3 program has expired. Table 3 of this section shows the years for which this applies. To use these early allowances, you must use engines that meet the emission standards described in paragraph (e) of this section. You must also count these units or calculate these percentages as described in paragraph (c) of this section and apply them toward the total number or percentage of equipment with exempted engines we allow for the Tier 4 standards as described in paragraph (b) of this section. The maximum number of cumulative early allowances under this paragraph (d)(4) is 10 percent under the percent-of-production allowance or 100 units under the small-volume allowance. For example, if you produce 5 percent of your equipment with engines between 130 and 560 kW that use allowances under this paragraph (d)(4) in 2009, you may use up to an additional 5 percent of your allowances in 2010. If you use allowances for 5 percent of your equipment in both 2009 and 2010, your 80 percent allowance for 2011–2017 in the 130–560 kW power category decreases to 70 percent. Manufacturers using allowances under this paragraph (d)(4) must comply with the notification and reporting requirements specified in paragraph (g) of this section.

* * * * *

(e) * * *

(1) If you are using the provisions of paragraph (d)(4) of this section, engines must meet the applicable Tier 1 or Tier 2 emission standards described in Appendix I of this part.

* * * * *

(3) In all other cases, engines at or above 56 kW and at or below 560 kW must meet the appropriate Tier 3 standards described in Appendix I of this part. Engines below 56 kW and engines above 560 kW must meet the appropriate Tier 2 standards described in Appendix I of this part.

* * * * *

(g) * * *

(1) * * *

(vi) The number of units in each power category you have sold in years for which the Tier 2 and Tier 3 standards apply.

* * * * *

(j) *Provisions for engine manufacturers.* As an engine manufacturer, you may produce exempted engines as needed under this section. You do not have to request this exemption for your engines, but you must have written assurance from equipment manufacturers that they need a certain number of exempted engines under this section. Send us an annual report of the engines you produce under this section, as described in § 1039.250(a). Exempt engines must meet the emission standards in paragraph (e) of this section and you must meet all the requirements of 40 CFR 1068.265, except that engines produced under the provisions of paragraph (a)(2) of this section must be identical in all material respects to engines previously certified under this part 1039. If you show under 40 CFR 1068.265(c) that the engines are identical in all material respects to engines that you have previously certified to one or more FELs above the standards specified in paragraph (e) of this section, you must supply sufficient credits for these engines. Calculate these credits under subpart H of this part using the previously certified FELs and the alternate standards. You must meet the labeling requirements in § 1039.135, as applicable, with the following exceptions:

(1) Add the following statement instead of the compliance statement in § 1039.135(c)(12): THIS ENGINE MEETS U.S. EPA EMISSION STANDARDS UNDER 40 CFR 1039.625. SELLING OR INSTALLING THIS ENGINE FOR ANY PURPOSE OTHER THAN FOR THE EQUIPMENT FLEXIBILITY PROVISIONS OF 40 CFR 1039.625 MAY BE A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY.

* * * * *

■ 182. Amend § 1039.626 by revising paragraph (b)(1)(iv) to read as follows:

§ 1039.626 What special provisions apply to equipment imported under the equipment-manufacturer flexibility program?

* * * * *

(b) * * *

(1) * * *

(iv) The number of units in each power category you have imported in years for which the Tier 2 and Tier 3 standards apply.

* * * * *

■ 183. Amend § 1039.655 by revising paragraphs (a)(2) and (b) to read as follows:

§ 1039.655 What special provisions apply to engines sold in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

(a) * * *

(2) The engine meets the latest applicable emission standards in Appendix I of this part.

* * * * *

(b) If you introduce an engine into commerce in the United States under this section, you must meet the labeling requirements in § 1039.135, but add the following statement instead of the compliance statement in § 1039.135(c)(12): THIS ENGINE DOES NOT COMPLY WITH U.S. EPA TIER 4 EMISSION REQUIREMENTS. IMPORTING THIS ENGINE INTO THE UNITED STATES OR ANY TERRITORY OF THE UNITED STATES EXCEPT GUAM, AMERICAN SAMOA, OR THE COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS MAY BE A VIOLATION OF FEDERAL LAW SUBJECT TO CIVIL PENALTY.

* * * * *

■ 184. Amend § 1039.740 by revising paragraph (b) to read as follows:

§ 1039.740 What restrictions apply for using emission credits?

* * * * *

(b) *Emission credits from earlier tiers of standards.* (1) For purposes of ABT under this subpart, you may not use emission credits generated from engines subject to emission standards identified in Appendix I of this part, except as specified in § 1039.102(d)(1) or the following table:

If the maximum power of the credit-generating engine is . . .	And it was certified to the following standards identified in Appendix I of this part . . .	Then you may use those banked credits for the following Tier 4 engines . . .
(i) kW<9	Tier 2	kW<9.
(ii) 19≤kW<37	Tier 2	kW≥19.
(iii) 37≤kW≤560	Tier 3	kW≥19.
(iv) kW>560	Tier 2	kW≥19.

(2) Emission credits generated from marine engines certified to the standards identified in Appendix I of this part for land-based engines may not be used under this part.

* * * * *

■ 185. Amend § 1039.801 by:

■ a. Revising the definition for ''Low-hour'';

■ b. Revising paragraph (5)(ii) for the definition of ''Model year''; and

■ c. Revising the definitions for ''Small-volume engine manufacturer'', ''Tier 1'', ''Tier 2'', and ''Tier 3''.

The revisions read as follows.

§ 1039.801 What definitions apply to this part?

* * * * *

Low-hour means relating to an engine with stabilized emissions and represents the undeteriorated emission level. This would generally involve less than 125 hours of operation for engines at or below 560 kW and less than 300 hours of operation for engines above 560 kW.

* * * * *

Model year means one of the following things:

* * * * *

(5) * * *

(ii) For imported engines described in paragraph (5)(ii) of the definition of ''new nonroad engine,'' *model year* means the calendar year in which the engine is modified.

* * * * *

Small-volume engine manufacturer means an engine manufacturer with 1000 or fewer employees that has had annual U.S.-directed production volume of no more than 2,500 units. For manufacturers owned by a parent company, these limits apply to the total number of employees and production volume from the parent company and all its subsidiaries.

* * * * *

Tier 1 means relating to the Tier 1 emission standards identified in Appendix I of this part.

Tier 2 means relating to the Tier 2 emission standards identified in Appendix I of this part.

Tier 3 means relating to the Tier 3 emission standards identified in Appendix I of this part.

* * * * *

■ 186. Add Appendix I to part 1039 to read as follows:

Appendix I to Part 1039—Summary of Previous Emission Standards

The following standards, which EPA originally adopted under 40 CFR part 89, apply to nonroad compression-ignition engines produced before the model years specified in § 1039.1:

(a) Tier 1 standards apply as summarized in the following table:

TABLE 1 TO APPENDIX I—TIER 1 EMISSION STANDARDS (G/KW-HR)

Rated power (kW)	Starting model year	NO_X	HC	NO_X+NMHC	CO	PM
kW<8	2000			10.5	8.0	1.0
8≤kW<19	2000			9.5	6.6	0.80
19≤kW<37	1999			9.5	5.5	0.80
37≤kW< 75	1998	9.2				
75≤kW<130	1997					
130≤kW<560	1996	9.2	1.3		11.4	0.54
kW>560	2000					

(b) Tier 2 standards apply as summarized in the following table:

Table 2 to Appendix I—Tier 2 Emission Standards (g/kW-hr)

Rated Power (kW)	Starting Model Year	NOx+NMHC	CO	PM
kW< 8	2005	7.5	8.0	0.80
8 ≤ kW < 19	2005	7.5	6.6	0.80
19 ≤ kW < 37	2004	7.5	5.5	0.60
37 ≤ kW < 75	2004	7.5	5.0	0.40
75 ≤ kW < 130	2003	6.6	5.0	0.30
130 ≤ kW < 225	2003	6.6	3.5	0.20
225 ≤ kW < 450	2001	6.4	3.5	0.20
450 ≤ kW ≤ 560	2002			
kW > 560	2006			

(c) Tier 3 standards apply as summarized in the following table:

TABLE 3 TO APPENDIX I—TIER 3 EMISSION STANDARDS (G/KW-HR)

Rated power (kW)	Starting model year	NO_X+NMHC	CO	PM
37≤kW<75	2008	4.7	5.0	0.40

TABLE 3 TO APPENDIX I—TIER 3 EMISSION STANDARDS (G/KW-HR)—Continued

Rated power (kW)	Starting model year	NO_X+NMHC	CO	PM
75≤kW<130	2007	4.0	5.0	0.30
130≤kW≤560	2006	4.0	3.5	0.20

(d) Tier 1 through Tier 3 standards applied only for discrete-mode steady-state testing. There were no not-to-exceed standards or transient testing.

PART 1042—CONTROL OF EMISSIONS FROM NEW AND IN-USE MARINE COMPRESSION-IGNITION ENGINES AND VESSELS

■ 187. The authority statement for part 1042 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 188. Amend § 1042.1 by:
■ a. Revising paragraphs (b) and (c); and
■ b. Removing and reserving paragraph (d).

The revisions read as follows:

§ 1042.1 Applicability.

* * * * *

(b) New engines with maximum engine power below 37 kW and originally manufactured and certified before the model years identified in Table 1 to this section are subject to emission standards as specified in Appendix I of this part. The provisions of this part 1042 do not apply for such engines, except as follows beginning June 29, 2010:

(1) The allowances of this part apply.

(2) The definitions of ''new marine engine'' and ''model year'' apply.

(c) Marine engines originally meeting Tier 1 or Tier 2 standards as specified in Appendix I of this part remain subject to those standards. This includes uncertified engines that meet standards under 40 CFR 1068.265. Those engines remain subject to recall provisions as specified in 40 CFR part 1068, subpart F, throughout the useful life corresponding to the original certification. Also, tampering and defeat-device prohibitions continue to apply for those engines as specified in 40 CFR 1068.101. The remanufacturing provisions in subpart I of this part may apply for remanufactured engines originally manufactured in model years before the model years identified in Table 1 to this section.

* * * * *

■ 189. Amend § 1042.101 by revising paragraphs (a)(6), (c)(2), and (e)(2) to read as follows:

§ 1042.101 Exhaust emission standards for Category 1 and Category 2 engines.

(a) * * *

(6) Interim Tier 4 PM standards apply for 2014 and 2015 model year engines between 2000 and 3700 kW as specified in this paragraph (a)(6). These engines are considered Tier 4 engines.

(i) For Category 1 engines, the Tier 3 PM standards from Table 1 to this section continue to apply. PM FELs for these engines may not be higher than the applicable Tier 2 PM standards specified in Appendix I of this part.

(ii) For Category 2 engines with per-cylinder displacement below 15.0 liters, the Tier 3 PM standards from Table 2 to this section continue to apply. PM FELs for these engines may not be higher than 0.27 g/kW-hr.

(iii) For Category 2 engines with per-cylinder displacement at or above 15.0 liters, the PM standard is 0.34 g/kW-hr for engines at or above 2000 kW and below 3300 kW, and 0.27 g/kW-hr for engines at or above 3300 kW and below 3700 kW. PM FELs for these engines may not be higher than 0.50 g/kW-hr.

* * * * *

(c) * * *

(2) Determine the applicable NTE zone and subzones as described in § 1042.515. Determine NTE multipliers for specific zones and subzones and pollutants as follows:

(i) For marine engines certified using the duty cycle specified in § 1042.505(b)(1), except for variable-speed propulsion marine engines used with controllable-pitch propellers or with electrically coupled propellers, apply the following NTE multipliers:

(A) Subzone 1: 1.2 for Tier 3 NO_X+HC standards.

(B) Subzone 1: 1.5 for Tier 4 standards and Tier 3 PM and CO standards.

(C) Subzone 2: 1.5 for Tier 4 NO_X and HC standards and for Tier 3 NO_X+HC standards.

(D) Subzone 2: 1.9 for PM and CO standards.

(ii) For recreational marine engines certified using the duty cycle specified in § 1042.505(b)(2), except for variable-speed marine engines used with controllable-pitch propellers or with electrically coupled propellers, apply the following NTE multipliers:

(A) Subzone 1: 1.2 for Tier 3 NO_X+HC standards.

(B) Subzone 1: 1.5 for Tier 3 PM and CO standards.

(C) Subzones 2 and 3: 1.5 for Tier 3 NO_X+HC standards.

(D) Subzones 2 and 3: 1.9 for PM and CO standards.

(iii) For variable-speed marine engines used with controllable-pitch propellers or with electrically coupled propellers that are certified using the duty cycle specified in § 1042.505(b)(1), (2), or (3), apply the following NTE multipliers:

(A) Subzone 1: 1.2 for Tier 3 NO_X+HC standards.

(B) Subzone 1: 1.5 for Tier 4 standards and Tier 3 PM and CO standards.

(C) Subzone 2: 1.5 for Tier 4 NO_X and HC standards and for Tier 3 NO_X+HC standards.

(D) Subzone 2: 1.9 for PM and CO standards. However, there is no NTE standard in Subzone 2b for PM emissions if the engine family's applicable standard for PM is at or above 0.07 g/kW-hr.

(iv) For constant-speed engines certified using a duty cycle specified in § 1042.505(b)(3) or (4), apply the following NTE multipliers:

(A) Subzone 1: 1.2 for Tier 3 NO_X+HC standards.

(B) Subzone 1: 1.5 for Tier 4 standards and Tier 3 PM and CO standards.

(C) Subzone 2: 1.5 for Tier 4 NO_X and HC standards and for Tier 3 NO_X+HC standards.

(D) Subzone 2: 1.9 for PM and CO standards. However, there is no NTE standard for PM emissions if the engine family's applicable standard for PM is at or above 0.07 g/kW-hr.

(v) For variable-speed auxiliary marine engines certified using the duty cycle specified in § 1042.505(b)(5)(ii) or (iii):

(A) Subzone 1: 1.2 for Tier 3 NO_X+HC standards.

(B) Subzone 1: 1.5 for Tier 4 standards and Tier 3 PM and CO standards.

(C) Subzone 2: 1.2 for Tier 3 NO_X+HC standards.

(D) Subzone 2: 1.5 for Tier 4 standards and Tier 3 PM and CO standards. However, there is no NTE standard for PM emissions if the engine family's applicable standard for PM is at or above 0.07 g/kW-hr.

* * * * *

(e) * * *

(2) Specify a longer useful life in hours for an engine family under either of two conditions:

(i) If you design your engine to operate longer than the minimum useful life. Indicators of design life include your recommended overhaul interval and may also include your advertising and marketing materials.

(ii) If your basic mechanical warranty is longer than the minimum useful life.

* * * * *

■ 190. Amend § 1042.104 by revising paragraphs (a)(2) and (c) to read as follows:

§ 1042.104 Exhaust emission standards for Category 3 engines.

(a) * * *

(2) NO_X standards apply based on the engine's model year and maximum in-use engine speed as shown in the following table:

TABLE 1 TO § 1042.104—NO_X EMISSION STANDARDS FOR CATEGORY 3 ENGINES (G/KW-HR)

Emission standards	Model year	Maximum in-use engine speed		
		Less than 130 RPM	130–2000 RPM [a]	Over 2000 RPM
Tier 1	2004–2010	17.0	$45.0 \cdot n^{(-0.20)}$	9.8
Tier 2	2011–2015	14.4	$44.0 \cdot n^{(-0.23)}$	7.7
Tier 3 [b]	2016 and later	3.4	$9.0 \cdot n^{(-0.20)}$	2.0

[a] Applicable standards are calculated from n (maximum in-use engine speed, in RPM, as specified in § 1042.140). Round the standards to one decimal place.

[b] For engines designed with on-off controls as specified in § 1042.115(g), the Tier 2 standards continue to apply any time the engine has disabled its Tier 3 NO_X emission controls.

* * * * *

(c) *Mode caps.* Measured NO_X emissions from Tier 3 engines may not exceed the cap specified in this paragraph (c) for any applicable duty-cycle test modes with power greater than 10 percent maximum engine power. Calculate the mode cap by multiplying the applicable Tier 3 NO_X standard by 1.5 and rounding to the nearest 0.1 g/kW-hr. Note that mode caps do not apply for pollutants other than NO_X and do not apply for any modes of operation outside of the applicable duty cycles in § 1042.505. Category 3 engines are not subject to not-to-exceed standards.

* * * * *

■ 191. Amend § 1042.115 by revising paragraph (g) to read as follows:

§ 1042.115 Other requirements.

* * * * *

(g) *On-off controls for engines on Category 3 vessels.* Manufacturers may equip Category 3 propulsion engines with features that disable Tier 3 NO_X emission controls subject to the provisions of this paragraph (g). For auxiliary engines allowed to use on-off controls as specified in § 1042.650(d), read ''Tier 2'' to mean ''IMO Tier II'' and read ''Tier 3'' to mean ''IMO Tier III''.

(1) Features that disable Tier 3 NO_X emission controls are considered to be AECDs whether or not they meet the definition of an AECD. For example, manually operated on-off features are AECDs under this paragraph (g). The features must be identified in your application for certification as AECDs. For purposes of this paragraph (g), the term ''features that disable Tier 3 emission controls'' includes (but is not limited to) any combination of the following that cause the engine's emissions to exceed any Tier 3 emission standard:

(i) Bypassing of exhaust aftertreatment.

(ii) Reducing or eliminating flow of reductant to an SCR system.

(iii) Modulating engine calibration in a manner that increases engine-out emissions of a regulated pollutant.

(2) You must demonstrate that the AECD will not disable NO_X emission controls while operating shoreward of the boundaries of the North American ECA and the U.S. Caribbean Sea ECA. You must demonstrate that the AECD will not disable emission control while operating in these waters. (Note: See the regulations in 40 CFR part 1043 for requirements related to operation in ECAs, including foreign ECAs.) Compliance with this paragraph will generally require that the AECD operation be based on Global Positioning System (GPS) inputs. We may consider any relevant information to determine whether your AECD conforms to this paragraph (g).

(3) The onboard computer log must record in nonvolatile computer memory all incidents of engine operation with the Tier 3 NO_X emission controls disabled.

(4) The engine must comply with the Tier 2 NO_X standard when the Tier 3 NO_X emission controls are disabled.

■ 192. Amend § 1042.125 by revising paragraph (e) to read as follows:

§ 1042.125 Maintenance instructions.

* * * * *

(e) *Maintenance that is not emission-related.* For maintenance unrelated to emission controls, you may schedule any amount of inspection or maintenance. You may also take these inspection or maintenance steps during service accumulation on your emission-data engines, as long as they are reasonable and technologically necessary. This might include adding engine oil, changing air, fuel, or oil filters, servicing engine-cooling systems or fuel-water separator cartridges or elements, and adjusting idle speed, governor, engine bolt torque, valve lash, or injector lash. You may not perform this nonemission-related maintenance on emission-data engines more often than the least frequent intervals that you recommend to the ultimate purchaser.

* * * * *

■ 193. Amend § 1042.135 by revising paragraph (c)(13) to read as follows:

§ 1042.135 Labeling.

* * * * *

(c) * * *

(13) For engines above 130 kW that are intended for installation on domestic or public vessels, include the following statement: ''THIS ENGINE DOES NOT COMPLY WITH INTERNATIONAL MARINE REGULATIONS UNLESS IT IS ALSO COVERED BY AN EIAPP CERTIFICATE.''

* * * * *

■ 194. Amend § 1042.145 by:

■ a. Removing and reserving paragraphs (b), (c), (e), (h), and (i); and

■ b. Revising paragraph (j).

The revision reads as follows:

§ 1042.145 Interim provisions.

* * * * *

(j) *Installing land-based engines in marine vessels.* Vessel manufacturers and marine equipment manufacturers may apply the provisions of §§ 1042.605 and 1042.610 to land-based engines with maximum engine power at or above 37 kW and at or below 560 kW if they meet the Tier 3 emission

standards in Appendix I of 40 CFR part 1039 as specified in 40 CFR 1068.265. All the provisions of § 1042.605 or § 1042.610 apply as if those engines were certified to emission standards under 40 CFR part 1039. Similarly, engine manufacturers, vessel manufacturers, and marine equipment manufacturers must comply with all the provisions of 40 CFR part 1039 as if those engines were installed in land-based equipment. The following provisions apply for engine manufacturers shipping engines to vessel manufacturers or marine equipment manufacturers under this paragraph (j):

(1) You must label the engine as described in 40 CFR 1039.135, but identify the engine family name as it was last certified under 40 CFR part 1039 and include the following alternate compliance statement: ''THIS ENGINE MEETS THE TIER 3 STANDARDS FOR LAND–BASED NONROAD DIESEL ENGINES UNDER 40 CFR PART 1039. THIS ENGINE MAY BE USED ONLY IN A MARINE VESSEL UNDER THE DRESSING PROVISIONS OF 40 CFR 1042.605 OR 40 CFR 1042.610.''

(2) You must use the provisions of 40 CFR 1068.262 for shipping uncertified engines under this section to secondary engine manufacturers.

■ 195. Amend § 1042.225 by revising paragraph (e) to read as follows:

§ 1042.225 Amending applications for certification.

* * * * *

(e) The amended application applies starting with the date you submit the amended application, as follows:

(1) For engine families already covered by a certificate of conformity, you may start producing the new or modified engine configuration anytime after you send us your amended application and before we make a decision under paragraph (d) of this section. However, if we determine that the affected engines do not meet applicable requirements, we will notify you to cease production of the engines and may require you to recall the engines at no expense to the owner. Choosing to produce engines under this paragraph (e) is deemed to be consent to recall all engines that we determine do not meet applicable emission standards or other requirements and to remedy the nonconformity at no expense to the owner. If you do not provide information required under paragraph (c) of this section within 30 days after we request it, you must stop producing the new or modified engines.

(2) If you amend your application to make the amended application correct and complete, these changes do not apply retroactively. Also, if we determine that your amended application is not correct and complete, or otherwise does not conform to the regulation, we will notify you and describe how to address the error.

* * * * *

■ 196. Amend § 1042.235 by revising paragraph (d)(3) to read as follows:

§ 1042.235 Emission testing related to certification.

* * * * *

(d) * * *

(3) The data show that the emission-data engine would meet all the requirements that apply to the engine family covered by the application for certification. For engines originally tested to demonstrate compliance with Tier 1 or Tier 2 standards, you may consider those test procedures to be equivalent to the procedures we specify in subpart F of this part.

* * * * *

■ 197. Revise § 1042.255 to read as follows:

§ 1042.255 EPA decisions.

(a) If we determine an application is complete and shows that the engine family meets all the requirements of this part and the Clean Air Act, we will issue a certificate of conformity for the engine family for that model year. We may make the approval subject to additional conditions.

(b) We may deny an application for certification if we determine that an engine family fails to comply with emission standards or other requirements of this part or the Clean Air Act. We will base our decision on all available information. If we deny an application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke a certificate of conformity if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(3) Cause any test data to become inaccurate.

(4) Deny us from completing authorized activities (see 40 CFR 1068.20). This includes a failure to provide reasonable assistance.

(5) Produce engines for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend an application to include all engines being produced.

(7) Take any action that otherwise circumvents the intent of the Clean Air Act or this part, with respect to an engine family.

(d) We may void a certificate of conformity for an engine family if you fail to keep records, send reports, or give us information as required under this part or the Clean Air Act. Note that these are also violations of 40 CFR 1068.101(a)(2).

(e) We may void a certificate of conformity for an engine family if we find that you intentionally submitted false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete after submission.

(f) If we deny an application or suspend, revoke, or void a certificate, you may ask for a hearing (see § 1042.920).

■ 198. Amend § 1042.302 by revising paragraph (a) to read as follows:

§ 1042.302 Applicability of this subpart for Category 3 engines.

* * * * *

(a) You must test each Category 3 engine at the sea trial of the vessel in which it is installed or within the first 300 hours of operation, whichever occurs first. This may involve testing a fully assembled production engine before it is installed in the vessel. For engines with on-off controls, you may omit testing to demonstrate compliance with Tier 2 standards if the engine does not rely on aftertreatment when Tier 3 emission controls are disabled. Since you must test each engine, the provisions of §§ 1042.310 and 1042.315(b) do not apply for Category 3 engines. If we determine that an engine failure under this subpart is caused by defective components or design deficiencies, we may revoke or suspend your certificate for the engine family as described in § 1042.340. If we determine that an engine failure under this subpart is caused only by incorrect assembly, we may suspend your certificate for the engine family as described in § 1042.325. If the engine fails, you may continue operating only to complete the sea trial and return to port. It is a violation of 40 CFR 1068.101(b)(1) to operate the vessel further until you remedy the cause of failure. Each two-hour period of such operation constitutes a separate offense. A violation lasting less than two hours constitutes a single offense.

* * * * *

■ 199. Amend § 1042.605 by revising paragraphs (a), (b), (c), (d)(1)(ii), (d)(2), (d)(3)(ii), (f), and (h) to read as follows:

§ 1042.605 Dressing engines already certified to other standards for nonroad or heavy-duty highway engines for marine use.

(a) *General provisions.* If you are an engine manufacturer (including someone who marinizes a land-based engine), this section allows you to introduce new marine engines into U.S. commerce if they are already certified to the requirements that apply to compression-ignition engines under 40 CFR parts 85 and 86 or 40 CFR part 1033 or 1039 for the appropriate model year. If you comply with all the provisions of this section, we consider the certificate issued under 40 CFR part 86, 1033, or 1039 for each engine to also be a valid certificate of conformity under this part 1042 for its model year, without a separate application for certification under the requirements of this part 1042. This section does not apply for Category 3 engines.

(b) *Vessel-manufacturer provisions.* If you are not an engine manufacturer, you may install an engine certified for the appropriate model year under 40 CFR part 86, 1033, or 1039 in a marine vessel as long as you do not make any of the changes described in paragraph (d)(3) of this section and you meet the requirements of paragraph (e) of this section. If you modify the non-marine engine in any of the ways described in paragraph (d)(3) of this section, we will consider you a manufacturer of a new marine engine. Such engine modifications prevent you from using the provisions of this section.

(c) *Liability.* Engines for which you meet the requirements of this section are exempt from all the requirements and prohibitions of this part, except for those specified in this section. Engines exempted under this section must meet all the applicable requirements from 40 CFR parts 85 and 86 or 40 CFR part 1033 or 1039. This paragraph (c) applies to engine manufacturers, vessel manufacturers that use such an engine, and all other persons as if the engine were used in its originally intended application. The prohibited acts of 40 CFR 1068.101(a)(1) apply to these new engines and vessels; however, we consider the certificate issued under 40 CFR part 86, 1033, or 1039 for each engine to also be a valid certificate of conformity under this part 1042 for its model year. If we make a determination that these engines do not conform to the regulations during their useful life, we may require you to recall them under 40 CFR part 85 or 1068.

(d) * * *

(1) * * *

(ii) Land-based compression-ignition nonroad engines (40 CFR part 1039).

* * * * *

(2) The engine must have the label required under 40 CFR part 86, 1033, or 1039.

(3) * * *

(ii) Replacing an original turbocharger, except that small-volume engine manufacturers may replace an original turbocharger on a recreational engine with one that matches the performance of the original turbocharger.

* * * * *

(f) *Failure to comply.* If your engines do not meet the criteria listed in paragraph (d) of this section, they will be subject to the standards, requirements, and prohibitions of this part 1042 and the certificate issued under 40 CFR part(s) 86, 1033, or 1039 will not be deemed to also be a certificate issued under this part 1042. Introducing these engines into U.S. commerce as marine engines without a valid exemption or certificate of conformity under this part violates the prohibitions in 40 CFR 1068.101(a)(1).

* * * * *

(h) *Participation in averaging, banking and trading.* Engines adapted for marine use under this section may not generate or use emission credits under this part 1042. These engines may generate credits under the ABT provisions in 40 CFR part(s) 86, 1033, or 1039, as applicable. These engines must use emission credits under 40 CFR part(s) 86, 1033, or 1039 as applicable if they are certified to an FEL that exceeds an emission standard.

* * * * *

■ 200. Amend § 1042.610 by revising paragraphs (a), (c), (d)(1), (f), and (g) to read as follows:

§ 1042.610 Certifying auxiliary marine engines to land-based standards.

* * * * *

(a) *General provisions.* If you are an engine manufacturer, this section allows you to introduce new marine engines into U.S. commerce if they are already certified to the requirements that apply to compression-ignition engines under 40 CFR part 1039 for the appropriate model year. If you comply with all the provisions of this section, we consider the certificate issued under 40 CFR part 1039 for each engine to also be a valid certificate of conformity under this part 1042 for its model year, without a separate application for certification under the requirements of this part 1042.

* * * * *

(c) *Liability.* Engines for which you meet the requirements of this section are exempt from all the requirements and prohibitions of this part, except for those specified in this section. Engines exempted under this section must meet all the applicable requirements from 40 CFR part 1039. This paragraph (c) applies to engine manufacturers, vessel manufacturers that use such an engine, and all other persons as if the engine were used in its originally intended application. The prohibited acts of 40 CFR 1068.101(a)(1) apply to these new engines and vessels; however, we consider the certificate issued under 40 CFR part 1039 for each engine to also be a valid certificate of conformity under this part 1042 for its model year. If we make a determination that these engines do not conform to the regulations during their useful life, we may require you to recall them under 40 CFR part 1068.

(d) * * *

(1) The marine engine must be identical in all material respects to a land-based engine covered by a valid certificate of conformity for the appropriate model year showing that it meets emission standards for engines of that power rating under 40 CFR part 1039.

* * * * *

(f) *Failure to comply.* If your engines do not meet the criteria listed in paragraph (d) of this section, they will be subject to the standards, requirements, and prohibitions of this part 1042 and the certificate issued under 40 CFR part 1039 will not be deemed to also be a certificate issued under this part 1042. Introducing these engines into U.S. commerce as marine engines without a valid exemption or certificate of conformity under this part 1042 violates the prohibitions in 40 CFR 1068.101(a)(1).

(g) *Participation in averaging, banking and trading.* Engines using this exemption may not generate or use emission credits under this part 1042. These engines may generate credits under the ABT provisions in 40 CFR part 1039, as applicable. These engines must use emission credits under 40 CFR part 1039 as applicable if they are certified to an FEL that exceeds an emission standard.

* * * * *

■ 201. Amend § 1042.615 by revising paragraph (a) introductory text, paragraphs (a)(1), and (3) and adding paragraphs (f) and (g) to read as follows:

§ 1042.615 Replacement engine exemption.

* * * * *

(a) This paragraph (a) applies instead of the provisions of 40 CFR 1068.240(b)(2) for installing new marine engines in vessels that are not ''new vessels''. The prohibitions in 40 CFR 1068.101(a)(1) do not apply to a new replacement engine if all the following conditions are met:

(1) You use good engineering judgment to determine that no engine certified to the current requirements of this part is produced by any manufacturer with the appropriate physical or performance characteristics to repower the vessel. We have determined that Tier 4 engines with aftertreatment technology do not have the appropriate physical or performance characteristics to replace uncertified engines or engines certified to emission standards that are less stringent than the Tier 4 standards.

* * * * *

(3) Send us a report by September 30 of each year describing your engine shipments under this section from the preceding calendar year. Your report must include all the following things and be signed by an authorized representative of your company:

(i) Identify the number of Category 1 and Category 2 exempt replacement engines that meet Tier 1, Tier 2, or Tier 3 standards, or that meet no EPA standards. Count engines separately for each tier of standards.

(ii) Identify the number of engines that have been shipped (directly or indirectly) to a vessel owner. This includes engines shipped to anyone intending to install engines on behalf of a specific engine owner. Also include commercial Tier 3 engines with maximum engine power at or above 600 kW even if they have not been shipped to or designated for a specific vessel owner in the specified time frame.

(iii) Describe how you made the determinations described in paragraph (a)(1) of this section for each Category 1 and Category 2 exempt replacement engine for each vessel during the preceding year. For Tier 3 replacement engines at or above 600 kW, describe why any engines certified to Tier 4 standards without aftertreatment are not suitable.

(iv) Identify the number of Category 3 exempt replacement engines. We may require you to describe how you made the determinations described in paragraph (a)(1) of this section for each engine.

(v) Include the following statement:

I certify that the statements and information in the enclosed document are true, accurate, and complete to the best of my knowledge. I am aware that there are significant civil and criminal penalties for submitting false statements and information, or omitting required statements and information.

* * * * *

(f) The provisions of 40 CFR 1068.240(c) allow you to ship a limited number of exempt replacement engines to vessel owners or distributors without making the determinations described in paragraph (a) of this section. Note that such engines do not count toward the production limits of 40 CFR 1068.240(c) if you meet all the requirements of 40 CFR 1068.240(b) and this section by the due date for the annual report. You may count Tier 3 commercial marine replacement engines at or above 600 kW as tracked engines under 40 CFR 1068.240(b) even if they have not been shipped to or designated for a specific vessel owner in the specified time frame.

(g) In unusual circumstances, you may ask us to allow you to apply the replacement engine exemption of this section for repowering a vessel that becomes a ''new vessel'' under § 1042.901 as a result of modifications, as follows:

(1) You must demonstrate that no manufacturer produces an engine certified to Tier 4 standards with the appropriate physical or performance characteristics to repower the vessel. We will consider concerns about the size of the replacement engine and its compatibility with vessel components relative to the overall scope of the project.

(2) Exempt replacement engines under this paragraph (g) must meet the Tier 3 standards specified in § 1042.101 (or the Tier 2 standards if there are no Tier 3 standards).

(3) We will not approve a request for an exemption from the Tier 3 standards for any engines.

(4) You may not use the exemption provisions for untracked replacement engines under 40 CFR 1068.240(c) for repowering a vessel that becomes a ''new vessel'' under § 1042.901 as a result of modifications.

■ 202. Amend § 1042.650 by revising the introductory text and paragraph (b)(4) to read as follows:

§ 1042.650 Migratory vessels.

The provisions of paragraphs (a) through (c) of this section apply for Category 1 and Category 2 engines, including auxiliary engines installed on vessels with Category 3 propulsion engines; these provisions do not apply for any Category 3 engines. All engines exempted under this section must comply with the applicable requirements of 40 CFR part 1043.

* * * * *

(b) * * *

(4) Operating a vessel containing an engine exempted under this paragraph (b) violates the prohibitions in 40 CFR 1068.101(a)(1) if the vessel is not in full compliance with applicable requirements for international safety specified in paragraph (b)(1)(i) of this section.

* * * * *

■ 203. Amend § 1042.655 by revising the paragraph (b) to read as follows:

§ 1042.655 Special certification provisions for Category 3 engines with aftertreatment.

* * * * *

(b) *Required testing.* The emission-data engine must be tested as specified in subpart F of this part. Testing engine-out emissions to simulate operation with disabled Tier 3 emission controls must simulate backpressure and other parameters as needed to represent in-use operation with an SCR catalyst. The catalyst material or other aftertreatment device must be tested under conditions that accurately represent actual engine conditions for the test points. This catalyst or aftertreatment testing may be performed on a bench scale.

* * * * *

§ 1042.701 [Amended]

■ 204. Amend § 1042.701 by removing and reserving paragraph (j).

■ 205. Amend § 1042.801 by revising paragraph (f)(1) to read as follows:

§ 1042.801 General provisions.

* * * * *

(f) * * *

(1) Only fuel additives registered under 40 CFR part 79 may be used under this paragraph (f).

* * * * *

■ 206. Amend § 1042.836 by revising the introductory text and paragraph (c) to read as follows:

§ 1042.836 Marine certification of locomotive remanufacturing systems.

If you certify a Tier 0, Tier 1, or Tier 2 remanufacturing system for locomotives under 40 CFR part 1033, you may also certify the system under this part 1042, according to the provisions of this section.

* * * * *

(c) Systems that were certified to the standards of 40 CFR part 92 are subject to the following restrictions:

(1) Tier 0 locomotive systems may not be used for any Category 1 engines or Tier 1 or later Category 2 engines.

(2) Where systems certified to the standards of 40 CFR part 1033 are also

available for an engine, you may not use a system certified to the standards of 40 CFR part 92.

■ 207. Amend § 1042.901 by revising paragraph (3) of the definition for ''Model year'' to read as follows:

§ 1042.901 Definitions.

* * * * *

Model year means * * *

* * * * *

(3) For an uncertified marine engine excluded under § 1042.5 that is later subject to this part 1042 as a result of being installed in a different vessel, model year means the calendar year in which the engine was installed in the non-excluded vessel. For a marine engine excluded under § 1042.5 that is later subject to this part 1042 as a result of reflagging the vessel, model year means the calendar year in which the engine was originally manufactured. For a marine engine that becomes new under paragraph (7) of the definition of ''new marine engine,'' model year means the calendar year in which the engine was originally manufactured. (See definition of ''new marine engine,'' paragraphs (3) and (7).)

* * * * *

■ 208. Revise § 1042.910 to read as follows:

§ 1042.910 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Environmental Protection Agency must publish a document in the **Federal Register** and the material must be available to the public. All approved material is available for inspection at EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004, *www.epa.gov/dockets*, (202) 202–1744, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email *fedreg.legal@nara.gov* or go to: *www.archives.gov/federal-register/cfr/ibr-locations.html*.

(b) The International Maritime Organization, 4 Albert Embankment, London SE1 7SR, United Kingdom, or *www.imo.org*, or 44–(0)20–7735–7611.

(1) MARPOL Annex VI, Regulations for the Prevention of Air Pollution from Ships, Fourth Edition, 2017, and NO_X Technical Code 2008.

(i) Revised MARPOL Annex VI, Regulations for the Prevention of Pollution from Ships, Fourth Edition, 2017 (''2008 Annex VI''); IBR approved for § 1042.901.

(ii) NO_X Technical Code 2008, Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines, 2017 Edition, (''NO_X Technical Code''); IBR approved for §§ 1042.104(g), 1042.230(d), 1042.302(c) and (e), 1042.501(g), and 1042.901.

(2) [Reserved]

■ 209. Amend Appendix I to part 1042 by revising paragraph (a) introductory text, paragraph (b) introductory text, and paragraph (b)(3) to read as follows:

Appendix I to Part 1042—Summary of Previous Emission Standards

* * * * *

(a) *Engines below 37 kW.* Tier 1 and Tier 2 standards for engines below 37 kW originally adopted under 40 CFR part 89 apply as follows:

* * * * *

(b) *Engines at or above 37 kW.* Tier 1 and Tier 2 standards for engines at or above 37 kW originally adopted under 40 CFR part 94 apply as follows:

* * * * *

(3) *Tier 2 supplemental standards.* Not-to-exceed emission standards apply for all engines subject to the Tier 2 standards described in paragraph (b)(2) of this appendix.

PART 1043—CONTROL OF NO_X, SO_X, AND PM EMISSIONS FROM MARINE ENGINES AND VESSELS SUBJECT TO THE MARPOL PROTOCOL

■ 210. The authority statement for part 1043 continues to read as follows:

Authority: 33 U.S.C. 1901–1912.

■ 211. Amend § 1043.41 by revising paragraph (a) to read as follows:

§ 1043.41 EIAPP certification process.

* * * * *

(a) You must send the Designated Certification Officer a separate application for an EIAPP certificate for each engine family. An EIAPP certificate is valid starting with the indicated effective date and is valid for any production until such time as the design of the engine family changes or more stringent emission standards become applicable, whichever comes first. Note that an EIAPP certificate demonstrating compliance with Tier I or Tier II standards (but not the Tier III standard) is only a limited authorization to install engines on vessels. For example, you may produce such Tier I or Tier II engines, but those engines may not be installed in vessels that are subject to Tier III standards. You may obtain preliminary approval of portions of the application under 40 CFR 1042.210.

* * * * *

■ 212. Revise § 1043.100 to read as follows:

§ 1043.100 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Environmental Protection Agency must publish a document in the **Federal Register** and the material must be available to the public. All approved material is available for inspection at EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue NW, Washington, DC 20004, *www.epa.gov/dockets*, (202) 202–1744, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email *fedreg.legal@nara.gov*, or go to: *www.archives.gov/federal-register/cfr/ibr-locations.html.*

(b) The International Maritime Organization, 4 Albert Embankment, London SE1 7SR, United Kingdom, or *www.imo.org, or 44–(0)20–7735–7611.*

(1) MARPOL Annex VI, Regulations for the Prevention of Air Pollution from Ships, Fourth Edition, 2017, and NO_X Technical Code 2008.

(i) Revised MARPOL Annex VI, Regulations for the Prevention of Pollution from Ships, Fourth Edition, 2017 (''2008 Annex VI''); IBR approved for §§ 1043.1 introductory text, 1043.20, 1043.30(f), 1043.60(c), and 1043.70(a).

(ii) NO_X Technical Code 2008, Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines, 2017 Edition, (''NO_X Technical Code''); IBR approved for §§ 1043.20, 1043.41(b) and (h), and 1043.70(a).

(2) [Reserved]

PART 1045—CONTROL OF EMISSIONS FROM SPARK-IGNITION PROPULSION MARINE ENGINES AND VESSELS

■ 213. The authority statement for part 1045 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 214. Amend § 1045.1 by revising paragraph (c) to read as follows:

§ 1045.1 Does this part apply for my products?

* * * * *

(c) Outboard and personal watercraft engines originally meeting the standards specified in Appendix I remain subject to those standards. Those engines remain subject to recall provisions as specified in 40 CFR part 1068, subpart F, throughout the useful life

corresponding to the original certification. Also, tampering and defeat-device prohibitions continue to apply for those engines as specified in 40 CFR 1068.101.

* * * * *

■ 215. Amend § 1045.145 by removing and reserving paragraphs (a) through (g), (i) through (k), and (m) and revising paragraph (n) to read as follows:

§ 1045.145 Are there interim provisions that apply only for a limited time?

* * * * *

(n) *Continued use of 40 CFR part 91 test data.* You may continue to use test data based on the test procedures that applied for engines built before the requirements of this part 1045 started to apply if we allow you to use carryover emission data under 40 CFR 1045.235(d) for your engine family. You may also use those test procedures for production-line testing with any engine family whose certification is based on testing with those procedures. For any EPA testing, we will rely on the procedures described in subpart F of this part, even if you used carryover data based on older test procedures as allowed under this paragraph (n).

* * * * *

■ 216. Amend § 1045.235 by revising paragraph (d)(3) to read as follows:

§ 1045.235 What testing requirements apply for certification?

* * * * *

(d) * * *

(3) The data show that the emission-data engine would meet all the requirements that apply to the engine family covered by the application for certification.

* * * * *

■ 217. Revise § 1045.255 to read as follows:

§ 1045.255 What decisions may EPA make regarding a certificate of conformity?

(a) If we determine an application is complete and shows that the engine family meets all the requirements of this part and the Clean Air Act, we will issue a certificate of conformity for the engine family for that model year. We may make the approval subject to additional conditions.

(b) We may deny an application for certification if we determine that an engine family fails to comply with emission standards or other requirements of this part or the Clean Air Act. We will base our decision on all available information. If we deny an application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke a certificate of conformity if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(3) Cause any test data to become inaccurate.

(4) Deny us from completing authorized activities (see 40 CFR 1068.20). This includes a failure to provide reasonable assistance.

(5) Produce engines for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend an application to include all engines being produced.

(7) Take any action that otherwise circumvents the intent of the Clean Air Act or this part, with respect to an engine family.

(d) We may void a certificate of conformity for an engine family if you fail to keep records, send reports, or give us information as required under this part or the Clean Air Act. Note that these are also violations of 40 CFR 1068.101(a)(2).

(e) We may void a certificate of conformity for an engine family if we find that you intentionally submitted false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete after submission.

(f) If we deny an application or suspend, revoke, or void a certificate, you may ask for a hearing (see § 1045.820).

■ 218. Amend § 1045.310 by revising paragraph (a)(1) introductory text and paragraph (a)(1)(iv) to read as follows:

§ 1045.310 How must I select engines for production-line testing?

(a) * * *

(1) For engine families with projected U.S.-directed production volume of at least 1,600, the test periods are consecutive quarters (3 months). However, if your annual production period is not 12 months long, you may take the following alternative approach to define quarterly test periods:

* * * * *

(iv) If your annual production period is 301 days or longer, divide the annual production period evenly into four test periods. For example, if your annual production period is 392 days (56 weeks), divide the annual production period into four test periods of 98 days (14 weeks).

* * * * *

■ 219. Amend § 1045.501 by revising paragraph (c) to read as follows:

§ 1045.501 How do I run a valid emission test?

* * * * *

(c) *Fuels.* Use the fuels and lubricants specified in 40 CFR part 1065, subpart H, for all the testing we require in this part, except as specified in § 1045.515.

(1) Use gasoline meeting the specifications described in 40 CFR 1065.710(c) for general testing. For service accumulation, use the test fuel or any commercially available fuel that is representative of the fuel that in-use engines will use.

(2) You may alternatively use ethanol-blended gasoline meeting the specifications described in 40 CFR 1065.710(b) for general testing without our advance approval. If you use the ethanol-blended fuel for certifying a given engine family, you may also use it for production-line testing or any other testing you perform for that engine family under this part. If you use the ethanol-blended fuel for certifying a given engine family, we may use the ethanol-blended fuel or the specified neat gasoline test fuel with that engine family.

* * * * *

■ 220. Revise Appendix 1 to part 1045 to read as follows:

Appendix I to Part 1045—Summary of Previous Emission Standards

(a) The following standards, which EPA originally adopted under 40 CFR part 91, apply to outboard and personal watercraft engines produced from model year 2006 through 2009:

(1) For engines at or below 4.3 kW, the HC + NO_X standard is 81.00 g/kW-hr.

(2) For engines above 4.3 kW, the following HC + NO_X standard applies:

$$HC + NO_X \text{ standard} = (151 + 557/P^{0.9}) \cdot 0.250 + 6.00$$

Where:

STD = The HC + NO_X emission standard, in g/kW-hr.

P = The average power of an engine family, in kW.

(b) Table 1 of this appendix describes the phase-in standards for outboard and personal watercraft engines for model years 1998 through 2005. For engines with maximum engine power above 4.3 kW, the standard is expressed by the following formula, in g/kW-hr, with constants for each year identified in Table 1 of this appendix:

$$HC + NOx\,\text{standard} = \left(151 + \frac{557}{P^{0.9}}\right) \cdot A + B$$

TABLE 1 OF APPENDIX I—HC + NO_X PHASE-IN STANDARDS FOR OUTBOARD AND PERSONAL WATERCRAFT ENGINES

Model year	Maximum engine power <4.3 kW	Maximum engine power >4.3 kW	
		A	B
1998	278.00	0.917	2.44
1999	253.00	0.833	2.89
2000	228.00	0.750	3.33
2001	204.00	0.667	3.78
2002	179.00	0.583	4.22
2003	155.00	0.500	4.67
2004	130.00	0.417	5.11
2005	105.00	0.333	5.56

PART 1048—CONTROL OF EMISSIONS FROM NEW, LARGE NONROAD SPARK-IGNITION ENGINES

■ 221. The authority statement for part 1048 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 222. Revise § 1048.145 to read as follows:

§ 1048.145 Are there interim provisions that apply only for a limited time?

The provisions in this section apply instead of other provisions in this part. This section describes when these interim provisions expire.

(a)–(f) [Reserved]

(g) *Small-volume provisions.* If you qualify for the hardship provisions in § 1068.250 of this chapter, we may approve extensions of up to four years total.

■ 223. Revise § 1048.255 to read as follows:

§ 1048.255 What decisions may EPA make regarding a certificate of conformity?

(a) If we determine an application is complete and shows that the engine family meets all the requirements of this part and the Act, we will issue a certificate of conformity for the engine family for that model year. We may make the approval subject to additional conditions.

(b) We may deny an application for certification if we determine that an engine family fails to comply with emission standards or other requirements of this part or the Clean Air Act. We will base our decision on all available information. If we deny an application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke a certificate of conformity if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(3) Cause any test data to become inaccurate.

(4) Deny us from completing authorized activities (see 40 CFR 1068.20). This includes a failure to provide reasonable assistance.

(5) Produce engines for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend an application to include all engines being produced.

(7) Take any action that otherwise circumvents the intent of the Act or this part, with respect to an engine family.

(d) We may void a certificate of conformity for an engine family if you fail to keep records, send reports, or give us information as required under this part or the Act. Note that these are also violations of 40 CFR 1068.101(a)(2).

(e) We may void a certificate of conformity for an engine family if we find that you intentionally submitted false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete after submission.

(f) If we deny an application or suspend, revoke, or void a certificate, you may ask for a hearing (see § 1048.820).

■ 224. Amend § 1048.501 by revising paragraph (c) to read as follows:

§ 1048.501 How do I run a valid emission test?

* * * * *

(c) Use the fuels and lubricants specified in 40 CFR part 1065, subpart H, to perform valid tests for all the testing we require in this part, except as noted in § 1048.515.

(1) Use gasoline meeting the specifications described in 40 CFR 1065.710(c) for general testing. For service accumulation, use the test fuel or any commercially available fuel that is representative of the fuel that in-use engines will use.

(2) You may alternatively use ethanol-blended gasoline meeting the specifications described in 40 CFR 1065.710(b) for general testing without our advance approval. If you use the ethanol-blended fuel for certifying a given engine family, you may also use it for production-line testing or any other testing you perform for that engine family under this part. If you use the ethanol-blended fuel for certifying a given engine family, we may use the ethanol-blended fuel or the specified neat gasoline test fuel with that engine family.

* * * * *

PART 1051—CONTROL OF EMISSIONS FROM RECREATIONAL ENGINES AND VEHICLES

■ 225. The authority statement for part 1051 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 226. Revise § 1051.145 to read as follows:

§ 1051.145 What provisions apply only for a limited time?

(a) Apply the provisions in this section instead of others in this part for the periods and circumstances specified in this section.

(b) [Reserved]

■ 227. Revise § 1051.255 to read as follows:

§ 1051.255 What decisions may EPA make regarding a certificate of conformity?

(a) If we determine an application is complete and shows that the engine family meets all the requirements of this part and the Act, we will issue a certificate of conformity for the engine family for that model year. We may make the approval subject to additional conditions.

(b) We may deny an application for certification if we determine that an engine family fails to comply with emission standards or other requirements of this part or the Clean Air Act. We will base our decision on all available information. If we deny an application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke a certificate of conformity if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(3) Cause any test data to become inaccurate.

(4) Deny us from completing authorized activities (see 40 CFR 1068.20). This includes a failure to provide reasonable assistance.

(5) Produce engines for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend an application to include all engines being produced.

(7) Take any action that otherwise circumvents the intent of the Act or this part, with respect to an engine family.

(d) We may void a certificate of conformity for an engine family if you fail to keep records, send reports, or give us information as required under this part or the Clean Air Act. Note that these are also violations of 40 CFR 1068.101(a)(2).

(e) We may void a certificate of conformity for an engine family if we find that you intentionally submitted false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete after submission.

(f) If we deny an application or suspend, revoke, or void a certificate, you may ask for a hearing (see § 1051.820).

■ 228. Amend § 1051.310 by revising paragraph (a)(1) introductory text and paragraph (a)(1)(iv) to read as follows:

§ 1051.310 How must I select vehicles or engines for production-line testing?

(a) * * *

(1) For engine families with projected U.S.-directed production volume of at least 1,600, the test periods are consecutive quarters (3 months). However, if your annual production period is not 12 months long, you may take the following alternative approach to define quarterly test periods:

* * * * *

(iv) If your annual production period is 301 days or longer, divide the annual production period evenly into four test periods. For example, if your annual production period is 392 days (56 weeks), divide the annual production period into four test periods of 98 days (14 weeks).

* * * * *

■ 229. Amend § 1051.501 by revising paragraph (d) to read as follows:

§ 1051.501 What procedures must I use to test my vehicles or engines?

* * * * *

(d) *Fuels.* Use the fuels meeting the following specifications:

(1) *Exhaust.* Use the fuels and lubricants specified in 40 CFR part 1065, subpart H, for all the exhaust testing we require in this part. For service accumulation, use the test fuel or any commercially available fuel that is representative of the fuel that in-use engines will use. The following provisions apply for using specific fuel types:

(i) For gasoline-fueled engines, use the grade of gasoline specified in 40 CFR 1065.710(c) for general testing. You may alternatively use ethanol-blended gasoline meeting the specifications described in 40 CFR 1065.710(b) for general testing without our advance approval. If you use the ethanol-blended fuel for certifying a given engine family, you may also use it for production-line testing or any other testing you perform for that engine family under this part. If you use the ethanol-blended fuel for certifying a given engine family, we may use the ethanol-blended fuel or the specified neat gasoline test fuel with that engine family.

(ii) For diesel-fueled engines, use either low-sulfur diesel fuel or ultra low-sulfur diesel fuel meeting the specifications in 40 CFR 1065.703. If you use sulfur-sensitive technology as defined in 40 CFR 1039.801 and you measure emissions using ultra low-sulfur diesel fuel, you must add a permanent label near the fuel inlet with the following statement: ''ULTRA LOW SULFUR FUEL ONLY''.

(2) *Fuel Tank Permeation.* (i) For the preconditioning soak described in § 1051.515(a)(1) and fuel slosh durability test described in § 1051.515(d)(3), use the fuel specified in 40 CFR 1065.710(b), or the fuel specified in 40 CFR 1065.710(c) blended with 10 percent ethanol by volume. As an alternative, you may use Fuel CE10, which is Fuel C as specified in ASTM D 471–98 (see 40 CFR 1060.810) blended with 10 percent ethanol by volume.

(ii) For the permeation measurement test in § 1051.515(b), use the fuel specified in 40 CFR 1065.710(c). As an alternative, you may use any of the fuels specified in paragraph (d)(2)(i) of this section.

(3) *Fuel Hose Permeation.* Use the fuel specified in 40 CFR 1065.710(b), or the fuel specified in 40 CFR 1065.710(c) blended with 10 percent ethanol by volume for permeation testing of fuel lines. As an alternative, you may use Fuel CE10, which is Fuel C as specified in ASTM D 471–98 (see 40 CFR 1060.810) blended with 10 percent ethanol by volume.

* * * * *

PART 1054—CONTROL OF EMISSIONS FROM NEW, SMALL NONROAD SPARK-IGNITION ENGINES AND EQUIPMENT

■ 230. The authority statement for part 1054 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 231. Amend § 1054.1 by revising paragraphs (a)(1) and (5), (c), and (d) to read as follows:

§ 1054.1 Does this part apply for my engines and equipment?

(a) * * *

(1) The requirements of this part related to exhaust emissions apply to new, nonroad spark-ignition engines with maximum engine power at or below 19 kW. This includes auxiliary marine spark-ignition engines.

* * * * *

(5) We specify provisions in § 1054.145(f) and in § 1054.740 that allow for meeting the requirements of this part before the dates shown in Table 1 to this section. Engines, fuel-system components, or equipment certified to these standards are subject to all the requirements of this part as if these optional standards were mandatory.

* * * * *

(c) Engines originally meeting Phase 1 or Phase 2 standards as specified in Appendix I remain subject to those standards. Those engines remain subject to recall provisions as specified in 40 CFR part 1068, subpart F, throughout

the useful life corresponding to the original certification. Also, tampering and defeat-device prohibitions continue to apply for those engines as specified in 40 CFR 1068.101.

(d) The regulations in this part 1054 optionally apply to engines with maximum engine power at or below 30 kW and with displacement at or below 1,000 cubic centimeters that would otherwise be covered by 40 CFR part 1048. See 40 CFR 1048.615 for provisions related to this allowance.

* * * * *

■ 232. Revise § 1054.2 to read as follows:

§ 1054.2 Who is responsible for compliance?

(a) The requirements and prohibitions of this part apply to manufacturers of engines and equipment, as described in § 1054.1. The requirements of this part are generally addressed to manufacturers subject to this part's requirements. The term ''you'' generally means the certifying manufacturer. For provisions related to exhaust emissions, this generally means the engine manufacturer, especially for issues related to certification (including production-line testing, reporting, etc.). For provisions related to certification with respect to evaporative emissions, this generally means the equipment manufacturer. Note that for engines that become new after being placed into service (such as engines converted from highway or stationary use), the requirements that normally apply for manufacturers of freshly manufactured engines apply to the importer or any other entity we allow to obtain a certificate of conformity.

(b) Equipment manufacturers must meet applicable requirements as described in § 1054.20. Engine manufacturers that assemble an engine's complete fuel system are considered to be the equipment manufacturer with respect to evaporative emissions (see 40 CFR 1060.5). Note that certification requirements for component manufacturers are described in 40 CFR part 1060.

■ 233. Revise § 1054.30 to read as follows:

§ 1054.30 Submission of information.

Unless we specify otherwise, send all reports and requests for approval to the Designated Compliance Officer (see § 1054.801). See § 1054.825 for additional reporting and recordkeeping provisions.

■ 234. Amend § 1054.103 by revising paragraph (c) introductory text to read as follows:

§ 1054.103 What exhaust emission standards must my handheld engines meet?

* * * * *

(c) *Fuel types.* The exhaust emission standards in this section apply for engines using the fuel type on which the engines in the emission family are designed to operate. You must meet the numerical emission standards for hydrocarbon in this section based on the following types of hydrocarbon emissions for engines powered by the following fuels:

* * * * *

■ 235. Amend § 1054.105 by revising paragraph (c) introductory text to read as follows:

§ 1054.105 What exhaust emission standards must my nonhandheld engines meet?

* * * * *

(c) *Fuel types.* The exhaust emission standards in this section apply for engines using the fuel type on which the engines in the emission family are designed to operate. You must meet the numerical emission standards for hydrocarbon in this section based on the following types of hydrocarbon emissions for engines powered by the following fuels:

* * * * *

■ 236. Amend § 1054.110 by revising paragraph (b) to read as follows:

§ 1054.110 What evaporative emission standards must my handheld equipment meet?

* * * * *

(b) *Tank permeation.* Fuel tanks must meet the permeation requirements specified in 40 CFR 1060.103. These requirements apply for handheld equipment starting in the 2010 model year, except that they apply starting in the 2011 model year for structurally integrated nylon fuel tanks, in the 2012 model year for handheld equipment using nonhandheld engines, and in the 2013 model year for all small-volume emission families. For nonhandheld equipment using engines at or below 80 cc, the requirements of this paragraph (b) apply starting in the 2012 model year. You may generate or use emission credits to show compliance with the requirements of this paragraph (b) under the averaging, banking, and trading program as described in subpart H of this part. FEL caps apply as specified in § 1054.112(b)(1) through (3) starting in the 2015 model year.

* * * * *

■ 237. Amend § 1054.120 by revising paragraph (c) to read as follows:

§ 1054.120 What emission-related warranty requirements apply to me?

* * * * *

(c) *Components covered.* The emission-related warranty covers all components whose failure would increase an engine's emissions of any regulated pollutant, including components listed in 40 CFR part 1068, Appendix I, and components from any other system you develop to control emissions. The emission-related warranty covers these components even if another company produces the component. Your emission-related warranty does not need to cover components whose failure would not increase an engine's emissions of any regulated pollutant.

* * * * *

■ 238. Amend § 1054.125 by revising the introductory text and paragraphs (c) and (e) to read as follows:

§ 1054.125 What maintenance instructions must I give to buyers?

Give the ultimate purchaser of each new engine written instructions for properly maintaining and using the engine, including the emission control system as described in this section. The maintenance instructions also apply to service accumulation on your emission-data engines as described in § 1054.245 and in 40 CFR part 1065.

* * * * *

(c) *Special maintenance.* You may specify more frequent maintenance to address problems related to special situations, such as atypical engine operation. You must clearly state that this additional maintenance is associated with the special situation you are addressing. You may also address maintenance of low-use engines (such as recreational or stand-by engines) by specifying the maintenance interval in terms of calendar months or years in addition to your specifications in terms of engine operating hours. All special maintenance instructions must be consistent with good engineering judgment. We may disapprove your maintenance instructions if we determine that you have specified special maintenance steps to address engine operation that is not atypical, or that the maintenance is unlikely to occur in use. For example, this paragraph (c) does not allow you to design engines that require special maintenance for a certain type of expected operation. If we determine that certain maintenance items do not qualify as special maintenance under this paragraph (c), you may identify this as recommended additional

maintenance under paragraph (b) of this section.

* * * * *

(e) *Maintenance that is not emission-related.* For maintenance unrelated to emission controls, you may schedule any amount of inspection or maintenance. You may also take these inspection or maintenance steps during service accumulation on your emission-data engines, as long as they are reasonable and technologically necessary. This might include adding engine oil, changing fuel or oil filters, servicing engine-cooling systems, and adjusting idle speed, governor, engine bolt torque, valve lash, or injector lash. You may not perform this nonemission-related maintenance on emission-data engines more often than the least frequent intervals that you recommend to the ultimate purchaser.

* * * * *

■ 239. Amend § 1054.130 by revising paragraphs (b)(2) and (5) to read as follows:

§ 1054.130 What installation instructions must I give to equipment manufacturers?

* * * * *

(b) * * *

(2) State: ''Failing to follow these instructions when installing a certified engine in a piece of equipment violates federal law (40 CFR 1068.105(b)), subject to fines or other penalties as described in the Clean Air Act.''

* * * * *

(5) Describe how your certification is limited for any type of application. For example, if you certify engines only for rated-speed applications, tell equipment manufacturers that the engine must not be installed in equipment involving intermediate-speed operation. Also, if your wintertime engines are not certified to the otherwise applicable $HC+NO_X$ standards, tell equipment manufacturers that the engines must be installed in equipment that is used only in wintertime.

* * * * *

■ 240. Amend § 1054.135 by revising paragraphs (c)(2) and (e)(1) to read as follows:

§ 1054.135 How must I label and identify the engines I produce?

* * * * *

(c) * * *

(2) Include your full corporate name and trademark. You may identify another company and use its trademark instead of yours if you comply with the branding provisions of 40 CFR 1068.45.

* * * * *

(e) * * *

(1) You may identify other emission standards that the engine meets or does not meet (such as California standards), as long as this does not cause you to omit any of the information described in paragraph (c) of this section. You may include this information by adding it to the statement we specify or by including a separate statement.

* * * * *

■ 241. Revise § 1054.145 to read as follows:

§ 1054.145 Are there interim provisions that apply only for a limited time?

The provisions in this section apply instead of other provisions in this part. This section describes how and when these interim provisions apply.

(a)–(b) [Reserved]

(c) *Special provisions for handheld engines.* Handheld engines subject to Phase 3 emission standards must meet the standards at or above barometric pressures of 96.0 kPa in the standard configuration and are not required to meet emission standards at lower barometric pressures. This is intended to allow testing under most weather conditions at all altitudes up to 1,100 feet above sea level. In your application for certification, identify the altitude above which you rely on an altitude kit and describe your plan for making information and parts available such that you would reasonably expect that altitude kits would be widely used at all such altitudes.

(d) *Alignment of model years for exhaust and evaporative standards.* Evaporative emission standards generally apply based on the model year of the equipment, which is determined by the equipment's date of final assembly. However, in the first year of new emission standards, equipment manufacturers may apply evaporative emission standards based on the model year of the engine as shown on the engine's emission control information label. For example, for the fuel line permeation standards starting in 2012, equipment manufacturers may order a batch of 2011 model year engines for installation in 2012 model year equipment, subject to the anti-stockpiling provisions of 40 CFR 1068.105(a). The equipment with the 2011 model year engines would not need to meet fuel line permeation standards, as long as the equipment is fully assembled by December 31, 2012.

(e) [Reserved]

(f) *Early banking for evaporative emission standards—handheld equipment manufacturers.* You may earn emission credits for handheld equipment you produce before the evaporative emission standards of § 1054.110 apply. To do this, your equipment must use fuel tanks with a family emission limit below 1.5 g/m^2/day (or 2.5 g/m^2/day for testing at 40 °C). Calculate your credits as described in § 1054.706 based on the difference between the family emission limit and 1.5 g/m^2/day (or 2.5 g/m^2/day for testing at 40 °C).

(g) through (i) [Reserved]

(j) *Continued use of 40 CFR part 90 test data.* You may continue to use data based on the test procedures that apply for engines built before the requirements of this part 1054 start to apply if we allow you to use carryover emission data under 40 CFR 1054.235(d) for your emission family. You may also use those test procedures for measuring exhaust emissions for production-line testing with any engine family whose certification is based on testing with those procedures. For any EPA testing, we will rely on the procedures described in subpart F of this part, even if you used carryover data based on older test procedures as allowed under this paragraph (j).

(k)–(m) [Reserved]

(n) *California test fuel.* You may perform testing with a fuel meeting the requirements for certifying the engine in California instead of the fuel specified in § 1054.501(b)(2), as follows:

(1) You may certify individual engine families using data from testing conducted with California Phase 2 test fuel through model year 2019. Any EPA testing with such an engine family may use either this same certification fuel or the test fuel specified in § 1054.501.

(2) Starting in model year 2013, you may certify individual engine families using data from testing conducted with California Phase 3 test fuel. Any EPA testing with such an engine family may use either this same certification fuel or the test fuel specified in § 1054.501, unless you certify to the more stringent CO standards specified in this paragraph (n)(2). If you meet these alternate CO standards, we will also use California Phase 3 test fuel for any testing we perform with engines from that engine family. The following alternate CO standards apply instead of the CO standards specified in § 1054.103 or § 1054.105:

TABLE 1 TO § 1054.145—ALTERNATE CO STANDARDS FOR TESTING WITH CALIFORNIA PHASE 3 TEST FUEL

[g/kW-hr]

Engine type	Alternate CO standard
Class I	549
Class II	549
Class III	536
Class IV	536

TABLE 1 TO § 1054.145—ALTERNATE CO STANDARDS FOR TESTING WITH CALIFORNIA PHASE 3 TEST FUEL—Continued

[g/kW-hr]

Engine type	Alternate CO standard
Class V	536
Marine generators	4.5

■ 242. Amend § 1054.205 by revising paragraphs (o)(1), (p)(1), (v), and (x) to read as follows:

§ 1054.205 What must I include in my application?

* * * * *

(o) * * *

(1) Present emission data for hydrocarbon (such as THC, THCE, or NMHC, as applicable), NO_X, and CO on an emission-data engine to show your engines meet the applicable exhaust emission standards as specified in § 1054.101. Show emission figures before and after applying deterioration factors for each engine. Include test data from each applicable duty cycle specified in § 1054.505(b). If we specify more than one grade of any fuel type (for example, low-temperature and all-season gasoline), you need to submit test data only for one grade, unless the regulations of this part specify otherwise for your engine.

* * * * *

(p) * * *

(1) Report all valid test results involving measurement of pollutants for which emission standards apply. Also indicate whether there are test results from invalid tests or from any other tests of the emission-data engine, whether or not they were conducted according to the test procedures of subpart F of this part. We may require you to report these additional test results. We may ask you to send other information to confirm that your tests were valid under the requirements of this part and 40 CFR parts 1060 and 1065.

* * * * *

(v) Provide the following information about your plans for producing and selling engines:

(1) Identify the estimated initial and final dates for producing engines from the engine family for the model year.

(2) Identify the estimated date for initially introducing certified engines into U.S. commerce under this certificate. We will not release or share any information from your application for certification before this date unless we learn separately that you have already introduced certified engines into U.S. commerce.

(3) Include good-faith estimates of U.S.-directed production volumes. Include a justification for the estimated production volumes if they are substantially different than actual production volumes in earlier years for similar models. Also indicate whether you expect the engine family to contain only nonroad engines, only stationary engines, or both.

* * * * *

(x) Include the information required by other subparts of this part. For example, include the information required by § 1054.725 if you participate in the ABT program and include the information required by § 1054.690 if you need to post a bond under that section.

* * * * *

■ 243. Amend § 1054.220 by revising the section heading to read as follows.

§ 1054.220 How do I amend my maintenance instructions?

* * * * *

■ 244. Amend § 1054.225 by:

■ a. Revising the section heading, paragraphs (b), (e), and paragraph (f) introductory text; and

■ b. Adding paragraph (g).

The revisions and addition read as follows:

§ 1054.225 How do I amend my application for certification?

* * * * *

(b) To amend your application for certification, send the relevant information to the Designated Compliance Officer.

(1) Describe in detail the addition or change in the model or configuration you intend to make.

(2) Include engineering evaluations or data showing that the amended emission family complies with all applicable requirements. You may do this by showing that the original emission-data engine or emission-data equipment is still appropriate for showing that the amended family complies with all applicable requirements.

(3) If the original emission-data engine for the engine family is not appropriate to show compliance for the new or modified engine configuration, include new test data showing that the new or modified engine configuration meets the requirements of this part.

(4) Include any other information needed to make your application correct and complete.

* * * * *

(e) The amended application applies starting with the date you submit the amended application, as follows:

(1) For emission families already covered by a certificate of conformity, you may start producing a new or modified configuration anytime after you send us your amended application and before we make a decision under paragraph (d) of this section. However, if we determine that the affected configurations do not meet applicable requirements, we will notify you to cease production of the configurations and may require you to recall the engine or equipment at no expense to the owner. Choosing to produce engines under this paragraph (e) is deemed to be consent to recall all engines or equipment that we determine do not meet applicable emission standards or other requirements and to remedy the nonconformity at no expense to the owner. If you do not provide information required under paragraph (c) of this section within 30 days after we request it, you must stop producing the new or modified engine or equipment.

(2) If you amend your application to make the amended application correct and complete, these changes do not apply retroactively. Also, if we determine that your amended application is not correct and complete, or otherwise does not conform to the regulation, we will notify you and describe how to address the error.

(f) You may ask us to approve a change to your FEL with respect to exhaust emissions in certain cases after the start of production. The changed FEL may not apply to engines you have already introduced into U.S. commerce, except as described in this paragraph (f). If we approve a changed FEL after the start of production, you must identify the month and year for applying the new FEL. You may ask us to approve a change to your FEL in the following cases:

* * * * *

(g) You may produce engines as described in your amended application for certification and consider those engines to be in a certified configuration if we approve a new or modified engine configuration during the model year under paragraph (d) of this section. Similarly, you may modify in-use engines as described in your amended application for certification and consider those engines to be in a certified configuration if we approve a new or modified engine configuration at any time under paragraph (d) of this section. Modifying a new or in-use engine to be in a certified configuration does not violate the tampering prohibition of 40 CFR 1068.101(b)(1), as long as this does not involve changing

to a certified configuration with a higher family emission limit.

■ 245. Amend § 1054.235 by revising the section heading and paragraphs (a), (b), (c), and (d) to read as follows:

§ 1054.235 What testing requirements apply for certification?

* * * * *

(a) Select an emission-data engine from each engine family for testing as described in 40 CFR 1065.401. Select a configuration and set adjustable parameters in a way that is most likely to exceed the HC+NOx standard, using good engineering judgment. Configurations must be tested as they will be produced, including installed governors, if applicable.

(b) Test your emission-data engines using the procedures and equipment specified in subpart F of this part. In the case of dual-fuel engines, measure emissions when operating with each type of fuel for which you intend to certify the engine. In the case of flexible-fuel engines, measure emissions when operating with the fuel mixture that is most likely to cause the engine to exceed the applicable $HC+NO_X$ emission standard, though you may ask us to instead perform tests with both fuels separately if you can show that intermediate mixtures are not likely to occur in use.

(c) We may perform confirmatory testing by measuring emissions from any of your emission-data engines or other engines from the emission family, as follows:

(1) We may decide to do the testing at your plant or any other facility. If we do this, you must deliver the engine to a test facility we designate. The engine you provide must include appropriate manifolds, aftertreatment devices, electronic control units, and other emission-related components not normally attached directly to the engine block. If we do the testing at your plant, you must schedule it as soon as possible and make available the instruments, personnel, and equipment we need.

(2) If we measure emissions on one of your engines, the results of that testing become the official emission results for the engine.

(3) We may set the adjustable parameters of your engine to any point within the physically adjustable ranges (see § 1054.115(b)).

(4) Before we test one of your engines, we may calibrate it within normal production tolerances for anything we do not consider an adjustable parameter. For example, this would apply for a parameter that is subject to production variability because it is adjustable during production, but is not considered an adjustable parameter (as defined in § 1054.801) because it is permanently sealed.

(d) You may ask to use carryover emission data from a previous model year instead of doing new tests, but only if all the following are true:

(1) The emission family from the previous model year differs from the current emission family only with respect to model year, items identified in § 1054.225(a), or other characteristics unrelated to emissions. We may waive this criterion for differences we determine not to be relevant.

(2) The emission-data engine from the previous model year remains the appropriate emission-data engine under paragraph (b) of this section.

(3) The data show that the emission-data engine would meet all the requirements that apply to the emission family covered by the application for certification.

* * * * *

■ 246. Amend § 1054.240 by revising paragraphs (a), (b), (c), and (d) to read as follows:

§ 1054.240 How do I demonstrate that my emission family complies with exhaust emission standards?

(a) For purposes of certification, your emission family is considered in compliance with the emission standards in § 1054.101(a) if all emission-data engines representing that family have test results showing official emission results and deteriorated emission levels at or below these standards. This also applies for all test points for emission-data engines within the family used to establish deterioration factors. Note that your FELs are considered to be the applicable emission standards with which you must comply if you participate in the ABT program in subpart H of this part.

(b) Your engine family is deemed not to comply if any emission-data engine representing that family has test results showing an official emission result or a deteriorated emission level for any pollutant that is above an applicable emission standard. This also applies for all test points for emission-data engines within the family used to establish deterioration factors.

(c) Determine a deterioration factor to compare emission levels from the emission-data engine with the applicable emission standards. Section 1054.245 specifies how to test engines to develop deterioration factors that represent the expected deterioration in emissions over your engines' full useful life. Calculate a multiplicative deterioration factor as described in § 1054.245(b). If the deterioration factor is less than one, use one. Specify the deterioration factor to one more significant figure than the emission standard. In the case of dual-fuel and flexible-fuel engines, apply deterioration factors separately for each fuel type. You may use assigned deterioration factors that we establish for up to 10,000 nonhandheld engines from small-volume emission families in each model year, except that small-volume engine manufacturers may use assigned deterioration factors for any or all of their engine families.

(d) Determine the official emission result for each pollutant to at least one more decimal place than the applicable standard. Apply the deterioration factor to the official emission result, as described in § 1054.245(b), then round the adjusted figure to the same number of decimal places as the emission standard. Compare the rounded emission levels to the emission standard for each emission-data engine. In the case of $HC+NO_X$ standards, add the official emission results and apply the deterioration factor to the sum of the pollutants before rounding. However, if your deterioration factors are based on emission measurements that do not cover the engine's full useful life, apply deterioration factors to each pollutant and then add the results before rounding.

* * * * *

■ 247. Amend § 1054.245 by:

■ a. Revising paragraphs (a), (b)(1), (b)(3), (b)(5), and (c); and

■ b. Adding paragraph (d).

The revisions and addition read as follows:

§ 1054.245 How do I determine deterioration factors from exhaust durability testing?

* * * * *

(a) You may ask us to approve deterioration factors for an emission family based on emission measurements from similar engines if you have already given us these data for certifying other engines in the same or earlier model years. Use good engineering judgment to decide whether the two engines are similar. We will approve your request if you show us that the emission measurements from other engines reasonably represent in-use deterioration for the engine family for which you have not yet determined deterioration factors.

(b) * * *

(1) Measure emissions from the emission-data engine at a low-hour test point, at the midpoint of the useful life, and at the end of the useful life, except as specifically allowed by this paragraph (b). You may test at

additional evenly spaced intermediate points. Collect emission data using measurements to at least one more decimal place than the emission standard.

* * * * *

(3) In the case of dual-fuel or flexible-fuel engines, you may accumulate service hours on a single emission-data engine using the type or mixture of fuel expected to have the highest combustion and exhaust temperatures; you may ask us to approve a different fuel mixture for flexible-fuel engines if you demonstrate that a different criterion is more appropriate. For dual-fuel engines, you must measure emissions on each fuel type at each test point, either with separate engines dedicated to a given fuel, or with different configurations of a single engine.

* * * * *

(5) Calculate your deterioration factor using a linear least-squares fit of your test data, but treat the low-hour test point as occurring at hour zero. Your deterioration factor is the ratio of the calculated emission level at the point representing the full useful life to the calculated emission level at zero hours, expressed to one more decimal place than the applicable standard.

* * * * *

(c) If you qualify for using assigned deterioration factors under § 1054.240, determine the deterioration factors as follows:

(1) For two-stroke engines without aftertreatment, use a deterioration factor of 1.1 for HC, NO_X, and CO. For four-stroke engines without aftertreatment, use deterioration factors of 1.4 for HC, 1.0 for NO_X, and 1.1 for CO for Class 2 engines, and use 1.5 for HC and NO_X, and 1.1 for CO for all other engines.

(2) For Class 2 engines with aftertreatment, use a deterioration factor of 1.0 for NO_X. For all other cases involving engines with aftertreatment, calculate separate deterioration factors for HC, NO_X, and CO using the following equation:

$$DF = \frac{NE \cdot EDF - CC \cdot F}{NE - CC}$$

Where:

NE = engine-out emission levels (pre-catalyst) from the low-hour test result for a given pollutant, in g/kW-hr.

EDF = the deterioration factor specified in paragraph (c)(1) of this section for the type of engine for a given pollutant.

CC = the catalyst conversion from the low-hour test, in g/kW-hr. This is the difference between the official emission result and *NE.*

F = 1.0 for NO_X and 0.8 for HC and CO.

(3) Combine separate deterioration factors for HC and NO_X from paragraph (c)(2) of this section into a combined deterioration factor for HC+NO_X using the following equation:

$$DF_{\mathrm{HC+NOx}} = \frac{(NE_{\mathrm{HC}} - CC_{\mathrm{HC}}) \cdot DF_{\mathrm{HC}} + (NE_{\mathrm{NOx}} - CC_{\mathrm{NOx}}) \cdot DF_{\mathrm{NOx}}}{(NE_{\mathrm{HC}} - CC_{\mathrm{HC}}) + (NE_{\mathrm{NOx}} - CC_{\mathrm{NOx}})}$$

(d) Include the following information in your application for certification:

(1) If you determine your deterioration factors based on test data from a different emission family, explain why this is appropriate and include all the emission measurements on which you base the deterioration factor.

(2) If you do testing to determine deterioration factors, describe the form and extent of service accumulation, including the method you use to accumulate hours.

(3) If you calculate deterioration factors under paragraph (c) of this section, identify the parameters and variables you used for the calculation.

■ 248. Amend § 1054.250 by:

■ a. Removing and reserving paragraph (a)(3); and

■ b. Revising paragraphs (b)(3)(iv) and (c).

The revisions read as follows:

§ 1054.250 What records must I keep and what reports must I send to EPA?

* * * * *

(b) * * *

(3) * * *

(iv) All your emission tests (valid and invalid), including the date and purpose of each test and documentation of test parameters as specified in part 40 CFR part 1065.

* * * * *

(c) Keep required data from emission tests and all other information specified in this section for eight years after we issue your certificate. If you use the same emission data or other information for a later model year, the eight-year period restarts with each year that you continue to rely on the information.

* * * * *

■ 249. Revise § 1054.255 to read as follows:

§ 1054.255 What decisions may EPA make regarding a certificate of conformity?

(a) If we determine an application is complete and shows that the emission family meets all the requirements of this part and the Clean Air Act, we will issue a certificate of conformity for the emission family for that model year. We may make the approval subject to additional conditions.

(b) We may deny an application for certification if we determine that an emission family fails to comply with emission standards or other requirements of this part or the Clean Air Act. We will base our decision on all available information. If we deny an application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke a certificate of conformity if you do any of the following:

(1) Refuse to comply with any testing, reporting, or bonding requirements.

(2) Submit false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(3) Cause any test data to become inaccurate.

(4) Deny us from completing authorized activities (see 40 CFR 1068.20). This includes a failure to provide reasonable assistance.

(5) Produce engines or equipment for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend an application to include all engines or equipment being produced.

(7) Take any action that otherwise circumvents the intent of the Clean Air Act or this part, with respect to an emission family.

(d) We may void a certificate of conformity for an emission family if you fail to keep records, send reports, or give us information as required under this part or the Clean Air Act. Note that these are also violations of 40 CFR 1068.101(a)(2).

(e) We may void a certificate of conformity for an emission family if we find that you intentionally submitted false or incomplete information. This includes doing anything after submitting your application that causes the submitted information to be false or incomplete.

(f) If we deny an application or suspend, revoke, or void a certificate of conformity, you may ask for a hearing (see § 1054.820).

■ 250. Amend § 1054.301 by revising paragraph (a)(2) to read as follows:

§ 1054.301 When must I test my production-line engines?

(a) * * *

(2) We may exempt small-volume emission families from routine testing under this subpart. Submit your request for approval as described in § 1054.210. In your request, describe your basis for projecting a production volume below 5,000 units. We will approve your request if we agree that you have made good-faith estimates of your production volumes. You must promptly notify us if your actual production exceeds 5,000 units during the model year. If you exceed the production limit or if there is evidence of a nonconformity, we may require you to test production-line engines under this subpart, or under 40 CFR part 1068, subpart E, even if we have approved an exemption under this paragraph (a)(2).

* * * * *

■ 251. Amend § 1054.310 by revising paragraph (a)(1) introductory text, paragraphs (a)(1)(iv), and (c)(2) introductory text to read as follows:

§ 1054.310 How must I select engines for production-line testing?

(a) * * *

(1) For engine families with projected U.S.-directed production volume of at least 1,600, the test periods are consecutive quarters (3 months). However, if your annual production period is not 12 months long, you may take the following alternative approach to define quarterly test periods:

* * * * *

(iv) If your annual production period is 301 days or longer, divide the annual production period evenly into four test periods. For example, if your annual production period is 392 days (56 weeks), divide the annual production period into four test periods of 98 days (14 weeks).

* * * * *

(c) * * *

(2) Calculate the standard deviation, σ, for the test sample using the following formula:

* * * * *

■ 252. Amend § 1054.315 by revising paragraph (a)(1) to read as follows:

§ 1054.315 How do I know when my engine family fails the production-line testing requirements?

* * * * *

(a) * * *

(1) *Initial and final test results.* Calculate and round the test results for each engine. If you do multiple tests on an engine in a given configuration (without modifying the engine), calculate the initial results for each test, then add all the test results together and divide by the number of tests. Round this final calculated value for the final test results on that engine.

* * * * *

■ 253. Amend § 1054.320 by adding paragraph (c) to read as follows:

§ 1054.320 What happens if one of my production-line engines fails to meet emission standards?

* * * * *

(c) Use test data from a failing engine for the compliance demonstration under § 1054.315 as follows:

(1) Use the original, failing test results as described in § 1054.315, whether or not you modify the engine or destroy it.

(2) Do not use test results from a modified engine as final test results under § 1054.315, unless you change your production process for all engines to match the adjustments you made to the failing engine. If this occurs, count the modified engine as the next engine in the sequence, rather than averaging the results with the testing that occurred before modifying the engine.

■ 254. Amend § 1054.501 by revising paragraphs (b)(1) and (2), and paragraph (b)(4) introductory text to read as follows:

§ 1054.501 How do I run a valid emission test?

* * * * *

(b) * * *

(1) Measure the emissions of all exhaust constituents subject to emission standards as specified in § 1054.505 and 40 CFR part 1065. Measure CO_2, N_2O, and CH_4 as described in § 1054.235. See § 1054.650 for special provisions that apply for variable-speed engines (including engines shipped without governors).

(2) Use the appropriate fuels and lubricants specified in 40 CFR part 1065, subpart H, for all the testing we require in this part. Gasoline test fuel must meet the specifications in 40 CFR 1065.710(c), except as specified in § 1054.145(n), 40 CFR 1065.10, and 40 CFR 1065.701. Use gasoline specified for general testing except as specified in paragraph (d) of this section. For service accumulation, use the test fuel or any commercially available fuel that is representative of the fuel that in-use engines will use. Note that § 1054.145(n) allows for testing with gasoline test fuels specified by the California Air Resources Board for any individual engine family.

* * * * *

(4) The provisions of 40 CFR 1065.405 describe how to prepare an engine for testing. However, you may consider emission levels stable without measurement after 12 hours of engine operation, except for the following special provisions that apply for engine families with a useful life of 300 hours or less:

* * * * *

■ 255. Amend § 1054.505 by revising paragraph (b)(2) to read as follows:

§ 1054.505 How do I test engines?

* * * * *

(b) * * *

(2) For nonhandheld engines, use the six-mode duty cycle or the corresponding ramped-modal cycle described in paragraph (b) of Appendix II of this part. Control engine speeds and torques during idle mode as specified in paragraph (c) of this section. Control engine speed during the full-load operating mode as specified in paragraph (d) of this section. For all other modes, control engine speed to within 5 percent of the nominal speed specified in paragraph (d) of this section or let the installed governor (in the production configuration) control engine speed. For all modes except idle, control torque as needed to meet the cycle-validation criteria in paragraph (a)(1) of this section. The governor may be adjusted before emission sampling to target the nominal speed identified in paragraph (d) of this section, but the installed governor must control engine speed throughout the emission-sampling period whether the governor is adjusted or not. Note that ramped-modal testing involves continuous sampling, so governor adjustments may not occur during such a test. Note also that our testing may involve running the engine with the governor in the standard configuration even if you adjust the governor as described in this paragraph (b)(2) for certification or production-line testing.

* * * * *

■ 256. Amend § 1054.601 by adding paragraph (d) to read as follows:

§ 1054.601 What compliance provisions apply?

* * * * *

(d) Subpart C of this part describes how to test and certify dual-fuel and flexible-fuel engines. Some multi-fuel engines may not fit either of those defined terms. For such engines, we will determine whether it is most appropriate to treat them as single-fuel engines, dual-fuel engines, or flexible-

fuel engines based on the range of possible and expected fuel mixtures.

■ 257. Amend § 1054.612 by revising the introductory text to read as follows:

§ 1054.612 What special provisions apply for equipment manufacturers modifying certified nonhandheld engines?

The provisions of this section are limited to small-volume emission families.

* * * * *

■ 258. Amend § 1054.620 by revising paragraph (c)(2) to read as follows:

§ 1054.620 What are the provisions for exempting engines used solely for competition?

* * * * *

(c) * * *

(2) Sale of the equipment in which the engine is installed must be limited to professional competition teams, professional competitors, or other qualified competitors. Engine manufacturers may sell loose engines to these same qualified competitors, and to equipment manufacturers supplying competition models for qualified competitors.

* * * * *

§ § 1054.625 and 1054.626 [Removed]

■ 259. Remove §§ 1054.625 and 1054.626.

§ 1054.635 [Amended]

■ 260. Amend § 1054.635 by removing and reserving paragraph (c)(6).

§ 1054.640 [Removed]

■ 261. Remove § 1054.640.

■ 262. Revise § 1054.655 to read as follows:

§ 1054.655 What special provisions apply for installing and removing altitude kits?

An action for the purpose of installing or modifying altitude kits and performing other changes to compensate for changing altitude is not considered a prohibited act under 40 CFR 1068.101(b) if it is done consistent with the manufacturer's instructions.

■ 263. Amend § 1054.690 by revising paragraphs (f) and (i) to read as follows:

§ 1054.690 What bond requirements apply for certified engines?

* * * * *

(f) If you are required to post a bond under this section, you must get the bond from a third-party surety that is cited in the U.S. Department of Treasury Circular 570, ''Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies'' (*https://www.fiscal.treasury.gov/surety-bonds/circular-570.html*). You must maintain this bond for every year in which you sell certified engines. The surety agent remains responsible for obligations under the bond for two years after the bond is cancelled or expires without being replaced.

* * * * *

(i) If you are required to post a bond under this section, you must note that in your application for certification as described in § 1054.205. Your certification is conditioned on your compliance with this section. Your certificate is automatically suspended if you fail to comply with the requirements of this section. This suspension applies with respect to all engines in your possession as well as all engines being imported or otherwise introduced into U.S. commerce. For example, if you maintain a bond sufficient to cover 500 engines, you may introduce into U.S. commerce only 500 engines under your certificate; your certificate would be automatically suspended for any additional engines. Introducing such additional engines into U.S. commerce would violate 40 CFR 1068.101(a)(1). For importation, U.S. Customs may deny entry of engines lacking the necessary bond. This would apply if there is no bond, or if the value of the bond is not sufficient for the appropriate production volumes. We may also revoke your certificate.

* * * * *

■ 264. Amend § 1054.701 by revising paragraph (c)(2), paragraph (i) introductory text, and paragraph (i)(1) to read as follows:

§ 1054.701 General provisions.

* * * * *

(c) * * *

(2) Handheld engines and nonhandheld engines are in separate averaging sets with respect to exhaust emissions except as specified in § 1054.740(e). You may use emission credits generated with Phase 2 engines for Phase 3 handheld engines only if you can demonstrate that those credits were generated by handheld engines, except as specified in § 1054.740(e). Similarly, you may use emission credits generated with Phase 2 engines for Phase 3 nonhandheld engines only if you can demonstrate that those credits were generated by nonhandheld engines, subject to the provisions of § 1054.740.

* * * * *

(i) As described in § 1054.730, compliance with the requirements of this subpart is determined at the end of the model year based on actual U.S.-directed production volumes. Do not include any of the following engines or equipment to calculate emission credits:

(1) Engines or equipment with a permanent exemption under subpart G of this part or under 40 CFR part 1068.

* * * * *

■ 265. Amend § 1054.710 by revising paragraph (c) to read as follows:

§ 1054.710 How do I average emission credits?

* * * * *

(c) If you certify a family to an FEL that exceeds the otherwise applicable standard, you must obtain enough emission credits to offset the family's deficit by the due date for the final report required in § 1054.730. The emission credits used to address the deficit may come from your other families that generate emission credits in the same model year, from emission credits you have banked from previous model years, or from emission credits generated in the same or previous model years that you obtained through trading.

■ 266. Amend § 1054.715 by revising paragraph (b) to read as follows:

§ 1054.715 How do I bank emission credits?

* * * * *

(b) You may designate any emission credits you plan to bank in the reports you submit under § 1054.730 as reserved credits. During the model year and before the due date for the final report, you may designate your reserved emission credits for averaging or trading.

* * * * *

■ 267. Amend § 1054.725 by revising paragraph (b)(2) to read as follows:

§ 1054.725 What must I include in my application for certification?

* * * * *

(b) * * *

(2) Detailed calculations of projected emission credits (positive or negative) based on projected production volumes. We may require you to include similar calculations from your other engine families to demonstrate that you will be able to avoid negative credit balances for the model year. If you project negative emission credits for a family, state the source of positive emission credits you expect to use to offset the negative emission credits.

■ 268. Amend § 1054.730 by revising paragraphs (b)(1), (b)(3), (b)(4), (d)(1)(iii), and (d)(2)(iii) to read as follows:

§ 1054.730 What ABT reports must I send to EPA?

* * * * *

(b) * * *

(1) Family designation and averaging set.

* * * * *

(3) The FEL for each pollutant. If you change the FEL after the start of production, identify the date that you started using the new FEL and/or give the engine identification number for the first engine covered by the new FEL. In this case, identify each applicable FEL and calculate the positive or negative emission credits as specified in § 1054.225.

(4) The projected and actual U.S.-directed production volumes for the model year as described in § 1054.701(i). For fuel tanks, state the production volume in terms of surface area and production volume for each fuel tank configuration and state the total surface area for the emission family. If you changed an FEL during the model year, identify the actual U.S.-directed production volume associated with each FEL.

* * * * *

(d) * * *

(1) * * *

(iii) The averaging set corresponding to the families that generated emission credits for the trade, including the number of emission credits from each averaging set.

(2) * * *

(iii) How you intend to use the emission credits, including the number of emission credits you intend to apply for each averaging set.

* * * * *

■ 269. Amend § 1054.735 by revising paragraphs (a) and (b) to read as follows:

§ 1054.735 What records must I keep?

(a) You must organize and maintain your records as described in this section.

(b) Keep the records required by this section for at least eight years after the due date for the end-of-year report. You may not use emission credits for any engines or equipment if you do not keep all the records required under this section. You must therefore keep these records to continue to bank valid credits.

* * * * *

■ 270. Amend § 1054.740 by revising paragraph (c) and removing and reserving paragraph (d) to read as follows:

§ 1054.740 What special provisions apply for generating and using emission credits?

* * * * *

(c) You may not use emission credits generated by nonhandheld engines certified to Phase 2 emission standards to demonstrate compliance with the Phase 3 exhaust emission standards in 2014 and later model years.

* * * * *

■ 271. Amend § 1054.801 by:

■ a. Revising the definition for ''Designated Compliance Officer''.

■ b. Removing the definition for ''Dual-fuel engine''.

■ c. Adding a definition for ''Dual-fuel'' in alphabetical order.

■ d. Revising the definition for ''Engine configuration'' and ''Equipment manufacturer''.

■ e. Removing the definition for ''Flexible-fuel engine''.

■ f. Adding a definition for ''Flexible-fuel'' in alphabetical order.

■ g. Revising the definitions for ''Fuel type'', ''Handheld'', ''New nonroad engine'', ''New nonroad equipment'', ''Nonmethane hydrocarbon''. ''Nonroad engine'', ''Phase 1'', ''Phase 2'', and ''Placed into service''.

■ h. Removing the definition for ''Pressurized oil system''.

■ i. Revising the definitions for ''Small-volume emission family'', ''Small-volume equipment manufacturer'', ''Total hydrocarbon'', and ''Total hydrocarbon equivalent''.

The new and revised definitions read as follows:

§ 1054.801 What definitions apply to this part?

* * * * *

Designated Compliance Officer means the Director, Gasoline Engine Compliance Center, U.S. Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105; *complianceinfo@epa.gov*.

* * * * *

Dual-fuel means relating to an engine designed for operation on two different fuels but not on a continuous mixture of those fuels (see § 1054.601(d)). For purposes of this part, such an engine remains a dual-fuel engine even if it is designed for operation on three or more different fuels.

* * * * *

Engine configuration means a unique combination of engine hardware and calibration within an emission family. Engines within a single engine configuration differ only with respect to normal production variability or factors unrelated to emissions.

* * * * *

Equipment manufacturer means a manufacturer of nonroad equipment. All nonroad equipment manufacturing entities under the control of the same person are considered to be a single nonroad equipment manufacturer.

* * * * *

Flexible-fuel means relating to an engine designed for operation on any mixture of two or more different fuels (see § 1054.601(d)).

* * * * *

Fuel type means a general category of fuels such as gasoline or natural gas. There can be multiple grades within a single fuel type, such as premium gasoline, regular gasoline, or low-level ethanol-gasoline blends.

* * * * *

Handheld means relating to equipment that meets any of the following criteria:

(1) It is carried by the operator throughout the performance of its intended function.

(2) It is designed to operate multi-positionally, such as upside down or sideways, to complete its intended function.

(3) It has a combined engine and equipment dry weight under 16.0 kilograms, has no more than two wheels, and at least one of the following attributes is also present:

(i) The operator provides support or carries the equipment throughout the performance of its intended function. Carry means to completely bear the weight of the equipment, including the engine. Support means to hold a piece of equipment in position to prevent it from falling, slipping, or sinking, without carrying it.

(ii) The operator provides support or attitudinal control for the equipment throughout the performance of its intended function. Attitudinal control involves regulating the horizontal or vertical position of the equipment.

(4) It is an auger with a combined engine and equipment dry weight under 22.0 kilograms.

(5) It is used in a recreational application with a combined total vehicle dry weight under 20.0 kilograms.

(6) It is a hand-supported jackhammer or rammer/compactor. This does not include equipment that can remain upright without operator support, such as a plate compactor.

* * * * *

New nonroad engine means any of the following things:

(1) A freshly manufactured nonroad engine for which the ultimate purchaser has never received the equitable or legal title. This kind of engine might commonly be thought of as ''brand new.'' In the case of this paragraph (1), the engine is new from the time it is produced until the ultimate purchaser receives the title or the product is placed into service, whichever comes first.

(2) An engine originally manufactured as a motor vehicle engine or a stationary

engine that is later used or intended to be used in a piece of nonroad equipment. In this case, the engine is no longer a motor vehicle or stationary engine and becomes a ''new nonroad engine.'' The engine is no longer new when it is placed into nonroad service. This paragraph (2) applies if a motor vehicle engine or a stationary engine is installed in nonroad equipment, or if a motor vehicle or a piece of stationary equipment is modified (or moved) to become nonroad equipment.

(3) A nonroad engine that has been previously placed into service in an application we exclude under § 1054.5, when that engine is installed in a piece of equipment that is covered by this part 1054. The engine is no longer new when it is placed into nonroad service covered by this part 1054. For example, this would apply to a marine-propulsion engine that is no longer used in a marine vessel but is instead installed in a piece of nonroad equipment subject to the provisions of this part.

(4) An engine not covered by paragraphs (1) through (3) of this definition that is intended to be installed in new nonroad equipment. This generally includes installation of used engines in new equipment. The engine is no longer new when the ultimate purchaser receives a title for the equipment or the product is placed into service, whichever comes first.

(5) An imported nonroad engine, subject to the following provisions:

(i) An imported nonroad engine covered by a certificate of conformity issued under this part that meets the criteria of one or more of paragraphs (1) through (4) of this definition, where the original engine manufacturer holds the certificate, is new as defined by those applicable paragraphs.

(ii) An imported engine that will be covered by a certificate of conformity issued under this part, where someone other than the original engine manufacturer holds the certificate (such as when the engine is modified after its initial assembly), is a new nonroad engine when it is imported. It is no longer new when the ultimate purchaser receives a title for the engine or it is placed into service, whichever comes first.

(iii) An imported nonroad engine that is not covered by a certificate of conformity issued under this part at the time of importation is new. This addresses uncertified engines and equipment initially placed into service that someone seeks to import into the United States. Importation of this kind of engine (or equipment containing such an engine) is generally prohibited by 40 CFR part 1068. However, the importation of such an engine is not prohibited if the engine has a date of manufacture before January 1, 1997, since it is not subject to standards.

New nonroad equipment means either of the following things:

(1) A nonroad piece of equipment for which the ultimate purchaser has never received the equitable or legal title. The product is no longer new when the ultimate purchaser receives this title or the product is placed into service, whichever comes first.

(2) A nonroad piece of equipment with an engine that becomes new while installed in the equipment. For example, a complete piece of equipment that was imported without being covered by a certificate of conformity would be new nonroad equipment because the engine would be considered new at the time of importation.

* * * * *

Nonmethane hydrocarbon has the meaning given in 40 CFR 1065.1001. This generally means the difference between the emitted mass of total hydrocarbon and the emitted mass of methane.

* * * * *

Nonroad engine has the meaning given in 40 CFR 1068.30. In general, this means all internal-combustion engines except motor vehicle engines, stationary engines, engines used solely for competition, or engines used in aircraft.

* * * * *

Phase 1 means relating to the Phase 1 emission standards described in Appendix I of this part.

Phase 2 means relating to the Phase 2 emission standards described in Appendix I of this part.

* * * * *

Placed into service means put into initial use for its intended purpose. Engines and equipment do not qualify as being ''placed into service'' based on incidental use by a manufacturer or dealer.

* * * * *

Small-volume emission family means one of the following:

(1) For requirements related to exhaust emissions for nonhandheld engines and to exhaust and evaporative emissions for handheld engines, *small-volume emission family* means any emission family whose U.S.-directed production volume in a given model year is projected at the time of certification to be no more than 5,000 engines or pieces of equipment.

(2) For requirements related to evaporative emissions for nonhandheld equipment, *small-volume emission family* means any equipment manufacturer's U.S.-directed production volume for identical fuel tank is projected at the time of certification to be no more than 5,000 units. Tanks are generally considered identical if they are produced under a single part number to conform to a single design or blueprint. Tanks should be considered identical if they differ only with respect to production variability, post-production changes (such as different fittings or grommets), supplier, color, or other extraneous design variables.

* * * * *

Small-volume equipment manufacturer means one of the following:

(1) For handheld equipment, an equipment manufacturer that had a U.S.-directed production volume of no more than 25,000 pieces of handheld equipment in any calendar year. For manufacturers owned by a parent company, this production limit applies to the production of the parent company and all its subsidiaries.

(2) For nonhandheld equipment, an equipment manufacturer with annual U.S.-directed production volumes of no more than 5,000 pieces of nonhandheld equipment in any calendar year. For manufacturers owned by a parent company, this production limit applies to the production of the parent company and all its subsidiaries.

(3) An equipment manufacturer that we designate to be a small-volume equipment manufacturer under § 1054.635.

* * * * *

Total hydrocarbon has the meaning given in 40 CFR 1065.1001. This generally means the combined mass of organic compounds measured by the specified procedure for measuring total hydrocarbon, expressed as an atomic hydrocarbon with an atomic hydrogen-to-carbon ratio of 1.85:1.

Total hydrocarbon equivalent has the meaning given in 40 CFR 1065.1001. This generally means the sum of the carbon mass contributions of non-oxygenated hydrocarbon, alcohols and aldehydes, or other organic compounds that are measured separately as contained in a gas sample, expressed as exhaust hydrocarbon from petroleum-fueled engines. The atomic hydrogen-to-carbon ratio of the equivalent hydrocarbon is 1.85:1.

* * * * *

■ 272. Revise § 1054.815 to read as follows:

§ 1054.815 What provisions apply to confidential information?

The provisions of 40 CFR 1068.10 apply for information you consider confidential.

■ 273. Revise § 1054.825 to read as follows:

§ 1054.825 What reporting and recordkeeping requirements apply under this part?

(a) This part includes various requirements to submit and record data or other information. Unless we specify otherwise, store required records in any format and on any media and keep them readily available for eight years after you send an associated application for certification, or eight years after you generate the data if they do not support an application for certification. We may request these records at any time. You must promptly give us organized, written records in English if we ask for them. This applies whether or not you rely on someone else to keep records on your behalf. We may require you to submit written records in an electronic format.

(b) The regulations in § 1054.255, 40 CFR 1068.25, and 40 CFR 1068.101 describe your obligation to report truthful and complete information. This includes information not related to certification. Failing to properly report information and keep the records we specify violates 40 CFR 1068.101(a)(2), which may involve civil or criminal penalties.

(c) Send all reports and requests for approval to the Designated Compliance Officer (see § 1054.801).

(d) Any written information we require you to send to or receive from another company is deemed to be a required record under this section. Such records are also deemed to be submissions to EPA. We may require you to send us these records whether or not you are a certificate holder.

(e) Under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), the Office of Management and Budget approves the reporting and recordkeeping specified in the applicable regulations. The following items illustrate the kind of reporting and recordkeeping we require for engines and equipment regulated under this part:

(1) We specify the following requirements related to engine and equipment certification in this part 1054:

(i) In § 1054.20 we require equipment manufacturers to label their equipment if they are relying on component certification.

(ii) In § 1054.135 we require engine manufacturers to keep certain records related to duplicate labels sent to equipment manufacturers.

(iii) In § 1054.145 we include various reporting and recordkeeping requirements related to interim provisions.

(iv) In subpart C of this part we identify a wide range of information required to certify engines.

(v) In §§ 1054.345 and 1054.350 we specify certain records related to production-line testing.

(vi) [Reserved]

(vii) In subpart G of this part we identify several reporting and recordkeeping items for making demonstrations and getting approval related to various special compliance provisions.

(viii) In §§ 1054.725, 1054.730, and 1054.735 we specify certain records related to averaging, banking, and trading.

(2) We specify the following requirements related to component and equipment certification in 40 CFR part 1060:

(i) In 40 CFR 1060.20 we give an overview of principles for reporting information.

(ii) In 40 CFR part 1060, subpart C, we identify a wide range of information required to certify products.

(iii) In 40 CFR 1060.301 we require manufacturers to keep records related to evaluation of production samples for verifying that the products are as specified in the certificate of conformity.

(iv) In 40 CFR 1060.310 we require manufacturers to make components, engines, or equipment available for our testing if we make such a request.

(iv) In 40 CFR 1060.505 we specify information needs for establishing various changes to published test procedures.

(3) We specify the following requirements related to testing in 40 CFR part 1065:

(i) In 40 CFR 1065.2 we give an overview of principles for reporting information.

(ii) In 40 CFR 1065.10 and 1065.12 we specify information needs for establishing various changes to published test procedures.

(iii) In 40 CFR 1065.25 we establish basic guidelines for storing test information.

(iv) In 40 CFR 1065.695 we identify the specific information and data items to record when measuring emissions.

(4) We specify the following requirements related to the general compliance provisions in 40 CFR part 1068:

(i) In 40 CFR 1068.5 we establish a process for evaluating good engineering judgment related to testing and certification.

(ii) In 40 CFR 1068.25 we describe general provisions related to sending and keeping information.

(iii) In 40 CFR 1068.27 we require manufacturers to make engines available for our testing or inspection if we make such a request.

(iv) In 40 CFR 1068.105 we require equipment manufacturers to keep certain records related to duplicate labels from engine manufacturers.

(v) In 40 CFR 1068.120 we specify recordkeeping related to rebuilding engines.

(vi) In 40 CFR part 1068, subpart C, we identify several reporting and recordkeeping items for making demonstrations and getting approval related to various exemptions.

(vii) In 40 CFR part 1068, subpart D, we identify several reporting and recordkeeping items for making demonstrations and getting approval related to importing engines.

(viii) In 40 CFR 1068.450 and 1068.455 we specify certain records related to testing production-line engines in a selective enforcement audit.

(ix) In 40 CFR 1068.501 we specify certain records related to investigating and reporting emission-related defects.

(x) In 40 CFR 1068.525 and 1068.530 we specify certain records related to recalling nonconforming engines.

(xi) In 40 CFR part 1068, subpart G, we specify certain records for requesting a hearing.

■ 274. Revise Appendix I to part 1054 to read as follows:

Appendix I to Part 1054—Summary of Previous Emission Standards

The following standards, which EPA originally adopted under 40 CFR part 90, apply to nonroad spark-ignition engines produced before the model years specified in § 1054.1:

(a) *Handheld engines.* (1) Phase 1 standards apply for handheld engines as summarized in the following table starting with model year 1997:

TABLE 1 TO APPENDIX I—PHASE 1 EMISSION STANDARDS FOR HANDHELD ENGINES

[g/kW-hr] [a]

Engine displacement class	HC	NO_X	CO
Class III	295	5.36	805
Class IV	241	5.36	805
Class V	161	5.36	603

[a] Phase 1 standards are based on testing with new engines only.

(2) Phase 2 standards apply for handheld engines as summarized in the following table starting with model year 2002 for Class III and Class IV, and starting in model year 2004 for Class V:

TABLE 2 TO APPENDIX I—PHASE 2 EMISSION STANDARDS FOR HANDHELD ENGINES

[g/kW-hr]

Engine displacement class	HC + NO_X	CO
Class III	[a] 50	805
Class IV	[b] 50	805
Class V	[c] 72	603

[a] Class III engines had alternate HC + NO_X standards of 238, 175, and 113 for model years 2002, 2003, and 2004, respectively.
[b] Class IV engines had alternate HC + NO_X standards of 196, 148, and 99 for model years 2002, 2003, and 2004, respectively.
[c] Class V engines had alternate HC + NO_X standards of 143, 119, and 96 for model years 2004, 2005, and 2006, respectively.

(b) *Nonhandheld engines.* (1) Phase 1 standards apply for nonhandheld engines as summarized in the following table starting with model year 1997:

TABLE 3 TO APPENDIX I—PHASE 1 EMISSION STANDARDS FOR NONHANDHELD ENGINES

[g/kW-hr] [a]

Engine displacement class	HC + NO_X	CO
Class I	16.1	519
Class II	13.4	519

[a] Phase 1 standards are based on testing with new engines only.

(2) Phase 2 standards apply for nonhandheld engines as summarized in the following table starting with model year 2001 (except as noted for Class I engines):

TABLE 4 TO APPENDIX I—PHASE 2 EMISSION STANDARDS FOR NONHANDHELD ENGINES

[g/kW-hr]

Engine displacement class	HC + NO_X	NMHC + NO_X	CO
Class I–A	50	.....	610
Class I–B	40	37	610
Class I [a]	16.1	14.8	610
Class II [b]	12.1	11.3	610

[a] The Phase 2 standards for Class I engines apply for new engines produced starting August 1, 2007, and for any engines belonging to an engine model whose original production date was on or after August 1, 2003.
[b] Class II engines had alternate HC + NO_X standards of 18.0, 16.6, 15.0, 13.6 and alternate NMHC + NO_X standards of 16.7, 15.3, 14.0, 12.7 for model years 2001 through 2004, respectively.

(3) Note that engines subject to Phase 1 standards were not subject to useful life provisions as specified in § 1054.107. In addition, engines subject to Phase 1 standards and engines subject to Phase 2 standards were both not subject to the following provisions:

(i) Evaporative emission standards as specified in §§ 1054.110 and 1054.112.

(ii) Altitude adjustments as specified in § 1054.115(c).

(iii) Warranty assurance provisions as specified in § 1054.120(f).

(iv) Emission-related installation instructions as specified in § 1054.130.

(v) Bonding requirements as specified in § 1054.690.

■ 275. Revise paragraph (b)(2) of Appendix II to part 1054 to read as follows:

Appendix II to Part 1054—Duty Cycles for Laboratory Testing

* * * * *

(b) * * *

(2) The following duty cycle applies for ramped-modal testing:

RMC mode [a]	Time in mode (seconds)	Torque (percent) [b c]
1a Steady-state	41	0
1b Transition	20	Linear transition
2a Steady-state	135	100
2b Transition	20	Linear transition
3a Steady-state	112	10
3b Transition	20	Linear transition
4a Steady-state	337	75
4b Transition	20	Linear transition
5a Steady-state	518	25
5b Transition	20	Linear transition
6a Steady-state	494	50
6b Transition	20	Linear transition
7 Steady-state	43	0

[a] Control engine speed as described in § 1054.505. Control engine speed for Mode 6 as described in § 1054.505(c) for idle operation.
[b] Advance from one mode to the next within a 20-second transition phase. During the transition phase, command a linear progression from the torque setting of the current mode to the torque setting of the next mode.
[c] The percent torque is relative to the value established for full-load torque, as described in § 1054.505.

PART 1060—CONTROL OF EVAPORATIVE EMISSIONS FROM NEW AND IN-USE NONROAD AND STATIONARY EQUIPMENT

■ 276. The authority citation for part 1060 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 277. Amend § 1060.1 by revising paragraphs (a)(8), (c), and (d) to read as follows:

§ 1060.1 Which products are subject to this part's requirements?

(a) * * *

(8) Portable nonroad fuel tanks are considered portable marine fuel tanks for purposes of this part 1060. Portable nonroad fuel tanks and fuel lines associated with such fuel tanks must therefore meet evaporative emission standards specified in 40 CFR 1045.112, whether or not they are used with marine vessels.

* * * * *

(c) Fuel caps are subject to evaporative emission standards at the point of installation on a fuel tank. When a fuel cap is certified for use with Marine SI engines or Small SI engines under the optional standards of § 1060.103, it becomes subject to all the requirements of this part 1060 as if these optional standards were mandatory.

(d) This part 1060 does not apply to any diesel-fueled engine or any other engine that does not use a volatile liquid fuel. In addition, this part does not apply to any engines or equipment in the following categories even if they use a volatile liquid fuel:

(1) Light-duty motor vehicles (see 40 CFR part 86).

(2) Heavy-duty motor vehicles and heavy-duty motor vehicle engines (see 40 CFR part 86). This part 1060 also does not apply to fuel systems for nonroad engines where such fuel systems are subject to part 86 because they are part of a heavy-duty motor vehicle.

(3) Aircraft engines (see 40 CFR part 87).

(4) Locomotives (see 40 CFR part 1033).

* * * * *

■ 278. Amend § 1060.5 by revising paragraph (a)(1) to read as follows:

§ 1060.5 Do the requirements of this part apply to me?

* * * * *

(a) * * *

(1) Each person meeting the definition of manufacturer for a product that is subject to the standards and other requirements of this part must comply with such requirements. However, if one person complies with a specific requirement for a given product, then all manufacturers are deemed to have complied with that specific requirement. For example, if a Small SI equipment manufacturer uses fuel lines manufactured and certified by another company, the equipment manufacturer is not required to obtain its own certificate with respect to the fuel line emission standards. Such an equipment manufacturer remains subject to the standards and other requirements of this part. However, where a provision requires a specific manufacturer to comply with certain provisions, this paragraph (a) does not change or modify such a requirement. For example, this paragraph (a) does not allow you to rely on another company to certify instead of you if we specifically require you to certify.

* * * * *

■ 279. Revise § 1060.30 to read as follows:

§ 1060.30 Submission of information.

Unless we specify otherwise, send all reports and requests for approval to the Designated Compliance Officer (see § 1060.801). See § 1060.825 for additional reporting and recordkeeping provisions.

■ 280. Amend § 1060.104 by revising paragraph (b)(3) to read as follows:

§ 1060.104 What running loss emission control requirements apply?

* * * * *

(b) * * *

(3) Get an approved Executive Order or other written approval from the California Air Resources Board showing that your system meets applicable running loss standards in California.

* * * * *

■ 281. Amend § 1060.105 by revising paragraphs (c)(1) and (e) to read as follows:

§ 1060.105 What diurnal requirements apply for equipment?

* * * * *

(c) * * *

(1) They must be self-sealing when detached from the engines. The tanks may not vent to the atmosphere when attached to an engine, except as allowed under paragraph (c)(2) of this section. An integrated or external manually activated device may be included in the fuel tank design to temporarily relieve pressure before refueling or connecting the fuel tank to the engine. However, the default setting for such a vent must be consistent with the requirement in paragraph (c)(2) of this section.

* * * * *

(e) Manufacturers of nonhandheld Small SI equipment may optionally meet the diurnal emission standards adopted by the California Air Resources Board. To meet this requirement, equipment must be certified to the performance standards specified in Title 13 CCR § 2754(a) based on the applicable requirements specified in CP–902 and TP–902, including the

requirements related to fuel caps in Title 13 CCR § 2756. Equipment certified under this paragraph (e) does not need to use fuel lines or fuel tanks that have been certified separately. Equipment certified under this paragraph (e) are subject to all the referenced requirements as if these specifications were mandatory.

* * * * *

■ 282. Amend § 1060.120 by revising paragraphs (b) and (c) to read as follows:

§ 1060.120 What emission-related warranty requirements apply?

* * * * *

(b) *Warranty period.* Your emission-related warranty must be valid for at least two years from the date the equipment is sold to the ultimate purchaser.

(c) *Components covered.* The emission-related warranty covers all components whose failure would increase the evaporative emissions, including those listed in 40 CFR part 1068, Appendix I, and those from any other system you develop to control emissions. Your emission-related warranty does not need to cover components whose failure would not increase evaporative emissions.

* * * * *

■ 283. Amend § 1060.130 by revising paragraph (b)(3) to read as follows:

§ 1060.130 What installation instructions must I give to equipment manufacturers?

* * * * *

(b) * * *

(3) Describe how your certification is limited for any type of application. For example:

(i) For fuel tanks sold without fuel caps, you must specify the requirements for the fuel cap, such as the allowable materials, thread pattern, how it must seal, etc. You must also include instructions to tether the fuel cap as described in § 1060.101(f)(1) if you do not sell your fuel tanks with tethered fuel caps. The following instructions apply for specifying a certain level of emission control for fuel caps that will be installed on your fuel tanks:

(A) If your testing involves a default emission value for fuel cap permeation as specified in § 1060.520(b)(5)(ii)(C), specify in your installation instructions that installed fuel caps must either be certified with a Family Emission Limit at or below 30 g/m^2/day, or have gaskets made of certain materials meeting the definition of ''low-permeability material'' in § 1060.801.

(B) If you certify your fuel tanks based on a fuel cap certified with a Family Emission Limit above 30 g/m^2/day, specify in your installation instructions that installed fuel caps must either be certified with a Family Emission Limit at or below the level you used for certifying your fuel tanks, or have gaskets made of certain materials meeting the definition of ''low-permeability material'' in § 1060.801.

(ii) If your fuel lines do not meet permeation standards specified in § 1060.102 for EPA Low-Emission Fuel Lines, tell equipment manufacturers not to install the fuel lines with Large SI engines that operate on gasoline or another volatile liquid fuel.

* * * * *

■ 284. Amend § 1060.135 by revising the introductory text and paragraphs (a) and (b) to read as follows:

§ 1060.135 How must I label and identify the engines and equipment I produce?

The labeling requirements of this section apply for all equipment manufacturers that are required to certify their equipment or use certified fuel-system components. Note that engine manufacturers are also considered equipment manufacturers if they install engines in equipment. See § 1060.137 for the labeling requirements that apply separately for fuel lines, fuel tanks, and other fuel-system components.

(a) At the time of manufacture, you must affix a permanent and legible label identifying each engine or piece of equipment. The label must be—

(1) Attached in one piece so it is not removable without being destroyed or defaced.

(2) Secured to a part of the engine or equipment needed for normal operation and not normally requiring replacement.

(3) Durable and readable for the equipment's entire life.

(4) Written in English.

(5) Readily visible in the final installation. It may be under a hinged door or other readily opened cover. It may not be hidden by any cover attached with screws or any similar designs. Labels on marine vessels (except personal watercraft) must be visible from the helm.

(b) If you hold a certificate under this part for your engine or equipment, the engine or equipment label specified in paragraph (a) of this section must—

(1) Include the heading ''EMISSION CONTROL INFORMATION''.

(2) Include your corporate name and trademark. You may identify another company and use its trademark instead of yours if you comply with the branding provisions of 40 CFR 1068.45.

(3) State the date of manufacture [MONTH and YEAR] of the equipment; however, you may omit this from the label if you stamp, engrave, or otherwise permanently identify it elsewhere on the equipment, in which case you must also describe in your application for certification where you will identify the date on the equipment.

(4) State: ''THIS [equipment, vehicle, boat, etc.] MEETS U.S. EPA EVAP STANDARDS.''

(5) Identify the emission family on the label using EPA's standardized designation or an abbreviated equipment code that you establish in your application for certification. Equipment manufacturers that also certify their engines with respect to exhaust emissions may use the same emission family name for both exhaust and evaporative emissions.

* * * * *

■ 285. Amend § 1060.137 by revising paragraphs (a)(4) and (c)(1) to read as follows:

§ 1060.137 How must I label and identify the fuel-system components I produce?

* * * * *

(a) * * *

(4) Fuel caps, as described in this paragraph (a)(4). Fuel caps must be labeled if they are separately certified under § 1060.103. If the equipment has a diurnal control system that requires the fuel tank to hold pressure, identify the part number on the fuel cap.

* * * * *

(c) * * *

(1) Include your corporate name. You may identify another company instead of yours if you comply with the provisions of 40 CFR 1068.45.

* * * * *

■ 286. Amend § 1060.205 by revising paragraphs (a) and (m) to read as follows:

§ 1060.205 What must I include in my application?

* * * * *

(a) Describe the emission family's specifications and other basic parameters of the emission controls. Describe how you meet the running loss emission control requirements in § 1060.104, if applicable. Describe how you meet any applicable equipment-based requirements of § 1060.101(e) and (f). State whether you are requesting certification for gasoline or some other fuel type. List each distinguishable configuration in the emission family. For equipment that relies on one or more certified components, identify all the certified components and any associated component codes.

* * * * *

(m) Report all valid test results. Also indicate whether there are test results from invalid tests or from any other tests

of the emission-data unit, whether or not they were conducted according to the test procedures of subpart F of this part. We may require you to report these additional test results. We may ask you to send other information to confirm that your tests were valid under the requirements of this part.

* * * * *

■ 287. Amend § 1060.225 by revising paragraphs (b), (e), and (g) and adding paragraph (h) to read as follows:

§ 1060.225 How do I amend my application for certification?

* * * * *

(b) To amend your application for certification, send the relevant information to the Designated Compliance Officer.

(1) Describe in detail the addition or change in the configuration you intend to make.

(2) Include engineering evaluations or data showing that the amended emission family complies with all applicable requirements. You may do this by showing that the original emission data are still appropriate for showing that the amended family complies with all applicable requirements.

(3) If the original emission data for the emission family are not appropriate to show compliance for the new or modified configuration, include new test data showing that the new or modified configuration meets the requirements of this part.

(4) Include any other information needed to make your application correct and complete.

* * * * *

(e) The amended application applies starting with the date you submit the amended application, as follows:

(1) For emission families already covered by a certificate of conformity, you may start producing a new or modified configuration anytime after you send us your amended application and before we make a decision under paragraph (d) of this section. However, if we determine that the affected configurations do not meet applicable requirements, we will notify you to cease production of the configurations and may require you to recall the equipment at no expense to the owner. Choosing to produce equipment under this paragraph (e) is deemed to be consent to recall all equipment that we determine do not meet applicable emission standards or other requirements and to remedy the nonconformity at no expense to the owner. If you do not provide information we request under paragraph (c) of this section within 30 days after we request it, you must stop producing the new or modified equipment.

(2) If you amend your application to make the amended application correct and complete, these changes do not apply retroactively. Also, if we determine that your amended application is not correct and complete, or otherwise does not conform to the regulation, we will notify you and describe how to address the error.

* * * * *

(g) You may produce equipment or components as described in your amended application for certification and consider those equipment or components to be in a certified configuration if we approve a new or modified configuration during the model year or production period under paragraph (d) of this section. Similarly, you may modify in-use products as described in your amended application for certification and consider those products to be in a certified configuration if we approve a new or modified configuration at any time under paragraph (d) of this section. Modifying a new or in-use product to be in a certified configuration does not violate the tampering prohibition of 40 CFR 1068.101(b)(1), as long as this does not involve changing to a certified configuration with a higher family emission limit.

(h) Component manufacturers may not change an emission family's FEL under any circumstances. Changing the FEL would require submission of a new application for certification.

■ 288. Amend § 1060.230 by revising paragraph (d)(2) to read as follows:

§ 1060.230 How do I select emission families?

* * * * *

(d) * * *

(2) Type of material (such as type of charcoal used in a carbon canister). This criterion does not apply for materials that are unrelated to emission control performance.

* * * * *

■ 289. Amend § 1060.235 by:

■ a. Revising the section heading;

■ b. Redesignating paragraph (a) as (h).

■ c. Redesignating paragraph (b) as paragraph (a) and paragraph (h) as paragraph (b);

■ d. Revising paragraphs (d) and (e)(1).

The revisions read as follows:

§ 1060.235 What testing requirements apply for certification?

* * * * *

(d) We may perform confirmatory testing by measuring emissions from any of your products from the emission family, as follows:

(1) You must supply your products to us if we choose to perform confirmatory testing. We may require you to deliver your test articles to a facility we designate for our testing.

(2) If we measure emissions on one of your products, the results of that testing become the official emission results for the emission family. Unless we later invalidate these data, we may decide not to consider your data in determining if your emission family meets applicable requirements.

(e) * * *

(1) The emission family from the previous production period differs from the current emission family only with respect to production period, items identified in § 1060.225(a), or other characteristics unrelated to emissions. We may waive this criterion for differences we determine not to be relevant.

* * * * *

■ 290. Amend § 1060.240 by revising paragraph (e)(2)(i) to read as follows:

§ 1060.240 How do I demonstrate that my emission family complies with evaporative emission standards?

* * * * *

(e) * * *

(2) * * *

(i) You may use the measurement procedures specified by the California Air Resources Board in Attachment 1 to TP–902 to show that canister working capacity is least 3.6 grams of vapor storage capacity per gallon of nominal fuel tank capacity (or 1.4 grams of vapor storage capacity per gallon of nominal fuel tank capacity for fuel tanks used in nontrailerable boats).

* * * * *

■ 291. Amend § 1060.250 by revising paragraphs (a)(3)(ii) and (b) to read as follows:

§ 1060.250 What records must I keep?

(a) * * *

(3) * * *

(ii) All your emission tests (valid and invalid), including the date and purpose of each test and documentation of test parameters described in subpart F of this part.

* * * * *

(b) Keep required data from emission tests and all other information specified in this section for eight years after we issue your certificate. If you use the same emission data or other information for a later model year, the eight-year period restarts with each year that you continue to rely on the information.

* * * * *

■ 292. Revise § 1060.255 to read as follows:

§ 1060.255 What decisions may EPA make regarding a certificate of conformity?

(a) If we determine an application is complete and shows that the emission family meets all the requirements of this part and the Clean Air Act, we will issue a certificate of conformity for the emission family for that production period. We may make the approval subject to additional conditions.

(b) We may deny an application for certification if we determine that an emission family fails to comply with emission standards or other requirements of this part or the Clean Air Act. We will base our decision on all available information. If we deny an application, we will explain why in writing.

(c) In addition, we may deny your application or suspend or revoke a certificate of conformity if you do any of the following:

(1) Refuse to comply with any testing or reporting requirements.

(2) Submit false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(3) Cause any test data to become inaccurate.

(4) Deny us from completing authorized activities (see 40 CFR 1068.20). This includes a failure to provide reasonable assistance.

(5) Produce equipment or components for importation into the United States at a location where local law prohibits us from carrying out authorized activities.

(6) Fail to supply requested information or amend an application to include all equipment or components being produced.

(7) Take any action that otherwise circumvents the intent of the Clean Air Act or this part, with respect to an emission family.

(d) We may void a certificate of conformity for an emission family if you fail to keep records, send reports, or give us information as required under this part or the Clean Air Act. Note that these are also violations of 40 CFR 1068.101(a)(2).

(e) We may void a certificate of conformity for an emission family if we find that you intentionally submitted false or incomplete information. This includes doing anything after submitting an application that causes submitted information to be false or incomplete.

(f) If we deny an application or suspend, revoke, or void a certificate of conformity, you may ask for a hearing (see § 1060.820).

■ 293. Amend § 1060.501 by revising paragraph (c) to read as follows:

§ 1060.501 General testing provisions.

* * * * *

(c) The specification for gasoline to be used for testing is given in 40 CFR 1065.710(b) or (c). Use the grade of gasoline specified for general testing. For testing specified in this part that requires blending gasoline and ethanol, blend this grade of neat gasoline with fuel-grade ethanol meeting the specifications of ASTM D4806 (incorporated by reference in § 1060.810). You do not need to measure the ethanol concentration of such blended fuels and may instead calculate the blended composition by assuming that the ethanol is pure and mixes perfectly with the base fuel. For example, if you mix 10.0 liters of fuel-grade ethanol with 90.0 liters of gasoline, you may assume the resulting mixture is 10.0 percent ethanol. You may use more pure or less pure ethanol if you can demonstrate that it will not affect your ability to demonstrate compliance with the applicable emission standards. Note that unless we specify otherwise, any references to gasoline-ethanol mixtures containing a specified ethanol concentration means mixtures meeting the provisions of this paragraph (c). The following table summarizes test fuel requirements for the procedures specified in this subpart:

Procedure	Reference	Test fuel [1]
Low-Emission Fuel Lines	§ 1060.510	CE10.
Nonroad Fuel Lines	§ 1060.515	CE10 [2].
Cold-Weather Fuel Lines	§ 1060.515	Splash-blended E10.
Fuel tank and fuel cap permeation	§ 1060.520	Splash-blended E10; manufacturers may instead use CE10.
Diurnal	§ 1060.525	E0.

[1] Pre-mixed gasoline blends are specified in 40 CFR 1065.710(b). Splash-blended gasoline blends are a mix of neat gasoline specified in 40 CFR 1065.710(c) and fuel-grade ethanol.

[2] Different fuel specifications apply for fuel lines tested under 40 CFR part 1051 for recreational vehicles, as described in 40 CFR 1051.501.

* * * * *

■ 294. Amend § 1060.505 by revising paragraph (c)(3) to read as follows:

§ 1060.505 Other procedures.

* * * * *

(c) * * *

(3) You may request to use alternate procedures that are equivalent to the specified procedures, or procedures that are more accurate or more precise than the specified procedures. We may perform tests with your equipment using either the approved alternate procedures or the specified procedures. See 40 CFR 1065.12 for a description of the information that is generally required for such alternate procedures.

* * * * *

■ 295. Amend § 1060.515 by revising paragraph (a)(2) to read as follows:

§ 1060.515 How do I test EPA Nonroad Fuel Lines and EPA Cold-Weather Fuel Lines for permeation emissions?

* * * * *

(a) * * *

(2) For EPA Cold-Weather Fuel Lines, use gasoline blended with ethanol as described in § 1060.501(c).

* * * * *

■ 296. Amend § 1060.520 by revising paragraphs (a), (b)(1), (b)(4), (d)(3), (d)(6), (d)(8)(ii), (d)(9), and (e) to read as follows:

§ 1060.520 How do I test fuel tanks for permeation emissions?

* * * * *

(a) *Preconditioning durability testing.* Take the following steps before an emission test, in any order, if your emission control technology involves surface treatment or other post-processing treatments such as an epoxy coating:

(1) *Pressure cycling.* Perform a pressure test by sealing the fuel tank and cycling it between +13.8 and −3.4 kPa (+2.0 and −0.5 psig) for 10,000 cycles at a rate of 60 seconds per cycle. The purpose of this test is to represent environmental wall stresses caused by pressure changes and other factors (such as vibration or thermal expansion). If your fuel tank cannot be tested using the pressure cycles specified by this paragraph (a)(1), you may ask to use special test procedures under § 1060.505.

(2) *UV exposure.* Perform a sunlight-exposure test by exposing the fuel tank to an ultraviolet light of at least 24 W/m^2 (0.40 W-hr/m^2/min) on the fuel tank

surface for at least 450 hours. Alternatively, the fuel tank may be exposed to direct natural sunlight for an equivalent period of time as long as you ensure that the fuel tank is exposed to at least 450 daylight hours.

(3) *Slosh testing.* Perform a slosh test by filling the fuel tank to 40–50 percent of its capacity with the fuel specified in paragraph (e) of this section and rocking it at a rate of 15 cycles per minute until you reach one million total cycles. Use an angle deviation of +15° to −15° from level. Take steps to ensure that the fuel remains at 40–50 percent of its capacity throughout the test run.

(4) *Cap testing.* Perform durability cycles on fuel caps intended for use with handheld equipment by putting the fuel cap on and taking it off 300 times. Tighten the fuel cap each time in a way that represents the typical in-use experience.

(b) * * *

(1) Fill the fuel tank to its nominal capacity with the fuel specified in paragraph (e) of this section, seal it, and allow it to soak at 28 ± 5 °C for at least 20 weeks. Alternatively, the fuel tank may be soaked for at least 10 weeks at 43 5 °C. You may count the time of the preconditioning steps in paragraph (a) of this section as part of the preconditioning fuel soak as long as the ambient temperature remains within the specified temperature range and the fuel tank continues to be at least 40 percent full throughout the test; you may add or replace fuel as needed to conduct the specified durability procedures. Void the test if you determine that the fuel tank has any kind of leak.

* * * * *

(4) Allow the fuel tank and its contents to equilibrate to the temperatures specified in paragraph (d)(7) of this section. Seal the fuel tank as described in paragraph (b)(5) of this section once the fuel temperatures are stabilized at the test temperature. You must seal the fuel tank no more than eight hours after refueling. Until the fuel tank is sealed, take steps to minimize the vapor losses from the fuel tank, such as keeping the fuel cap loose on the fuel inlet or routing vapors through a vent hose.

* * * * *

(d) * * *

(3) Carefully place the test tank within a temperature-controlled room or enclosure. Do not spill or add any fuel.

* * * * *

(6) Leave the test tank in the room or enclosure for the duration of the test run, except that you may remove the tank for up to 30 minutes at a time to meet weighing requirements.

* * * * *

(8) * * *

(ii) If after ten days of testing your r^2 value is below 0.95 and your measured value is more than 50 percent of the applicable standard, continue testing for a total of 20 days or until r^2 is at or above 0.95. If r^2 is not at or above 0.95 within 20 days of testing, discontinue the test and precondition the test tank further until it has stabilized emission levels, then repeat the testing.

(9) Record the difference in mass between the reference tank and the test tank for each measurement. This value is M_i, where i is a counter representing the number of days elapsed. Subtract M_i from M_o and divide the difference by the internal surface area of the fuel tank. Divide this g/m^2 value by the number of test days (using at least two decimal places) to calculate the emission rate in $g/m^2/day$. Example: If a fuel tank with an internal surface area of 0.720 m^2 weighed 1.31 grams less than the reference tank at the beginning of the test and weighed 9.86 grams less than the reference tank after soaking for 10.03 days, the emission rate would be—

$$((-1.31\ g)-(-9.86\ g))/0.720\ m^2/10.03\ days = 1.1839\ g/m^2/day$$

* * * * *

(e) *Fuel specifications.* Use a low-level ethanol-gasoline blend as specified in § 1060.501(c). As an alternative, you may use Fuel CE10, as described in § 1060.515(a)(1).

* * * * *

■ 297. Amend § 1060.525 by revising paragraph (a)(2) to read as follows:

§ 1060.525 How do I test fuel systems for diurnal emissions?

* * * * *

(a) * * *

(2) Fill the fuel tank to 40 percent of nominal capacity with the gasoline specified in 40 CFR 1065.710(c) for general testing.

* * * * *

■ 298. Amend § 1060.601 by revising paragraphs (a) and (b)(2) to read as follows:

§ 1060.601 How do the prohibitions of 40 CFR 1068.101 apply with respect to the requirements of this part?

(a) As described in § 1060.1, fuel tanks and fuel lines that are used with or intended to be used with new nonroad engines or equipment are subject to evaporative emission standards under this part 1060. This includes portable marine fuel tanks and fuel lines and other fuel-system components associated with portable marine fuel tanks. Note that § 1060.1 specifies an implementation schedule based on the date of manufacture of nonroad equipment, so new fuel tanks and fuel lines are not subject to standards under this part 1060 if they will be installed for use in equipment built before the specified dates for implementing the appropriate standards, subject to the limitations in paragraph (b) of this section. Except as specified in paragraph (f) of this section, fuel-system components that are subject to permeation or diurnal emission standards under this part 1060 must be covered by a valid certificate of conformity before being introduced into U.S. commerce to avoid violating the prohibition of 40 CFR 1068.101(a). To the extent we allow it under the exhaust standard-setting part, fuel-system components may be certified with a family emission limit higher than the specified emission standard.

(b) * * *

(2) *Applicability of standards after January 1, 2020.* Starting January 1, 2020, it is presumed that replacement components will be used with nonroad engines regulated under this part 1060 if they can reasonably be used with such engines. Manufacturers, distributors, retailers, and importers are therefore obligated to take reasonable steps to ensure that any uncertified components are not used to replace certified components. This would require labeling the components and may also require restricting the sales and requiring the ultimate purchaser to agree to not use the components inappropriately. This requirement does not apply for components that are clearly not intended for use with fuels.

* * * * *

■ 299. Add § 1060.610 to subpart G to read as follows:

§ 1060.610 Temporary exemptions for manufacturing and assembling equipment and fuel-system components.

(a) If you are a certificate holder, you may ship components or equipment requiring further assembly between two of your facilities, subject to the provisions of this paragraph (a). Unless we approve otherwise, you must maintain ownership and control of the products until they reach their destination. We may allow for shipment where you do not maintain actual ownership and control of the engines (such as hiring a shipping company to transport the products) but only if you demonstrate that the products will be transported only according to your specifications. Notify us of your intent to use this exemption in your application for certification, if

applicable. Your exemption is effective when we grant your certificate. You may alternatively request an exemption in a separate submission; for example, this would be necessary if you will not be the certificate holder for the products in question. We may require you to take specific steps to ensure that such products are in a certified configuration before reaching the ultimate purchaser. Note that since this is a temporary exemption, it does not allow you to sell or otherwise distribute equipment in an uncertified configuration to ultimate purchasers. Note also that the exempted equipment remains new and subject to emission standards until its title is transferred to the ultimate purchaser or it otherwise ceases to be new.

(b) If you certify equipment, you may ask us at the time of certification for an exemption to allow you to ship your equipment without a complete fuel system. We will generally approve this only if you can demonstrate that the exemption is necessary and that you will take steps to ensure that equipment assembly will be properly completed before reaching the ultimate purchaser. We may specify conditions that we determine are needed to ensure that shipping the equipment without such components will not result in the equipment operating with uncertified components or otherwise in an uncertified configuration. For example, we may require that you ship the equipment to manufacturers that are contractually obligated to install certain components. See 40 CFR 1068.261.

§ 1060.640 [Removed]

■ 300. Remove § 1060.640.

■ 301. Amend § 1060.801 by revising the definitions for ''Configuration'', ''Designated Compliance Officer'', ''Fuel type'', ''Model year'', ''Placed into service'', ''Portable nonroad fuel tank'', and ''Small SI'' to read as follows:

§ 1060.801 What definitions apply to this part?

* * * * *

Configuration means a unique combination of hardware (material, geometry, and size) and calibration within an emission family. Units within a single configuration differ only with respect to normal production variability or factors unrelated to emissions.

* * * * *

Designated Compliance Officer means the Director, Gasoline Engine Compliance Center, U.S. Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105; *complianceinfo@epa.gov*.

* * * * *

Fuel type means a general category of fuels such as gasoline or natural gas. There can be multiple grades within a single fuel type, such as premium gasoline, regular gasoline, or low-level ethanol-gasoline blends.

* * * * *

Model year means one of the following things:

(1) For equipment defined as ''new nonroad equipment'' under paragraph (1) of the definition of ''new nonroad engine,'' model year means one of the following:

(i) Calendar year of production.

(ii) Your annual new model production period if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.

(2) For other equipment defined as ''new nonroad equipment'' under paragraph (2) of the definition of ''new nonroad engine,'' model year has the meaning given in the exhaust standard-setting part.

(3) For other equipment defined as ''new nonroad equipment'' under paragraph (3) or paragraph (4) of the definition of ''new nonroad engine,'' model year means the model year of the engine as defined in the exhaust standard-setting part.

* * * * *

Placed into service means put into initial use for its intended purpose. Equipment does not qualify as being ''placed into service'' based on incidental use by a manufacturer or dealer.

* * * * *

Portable nonroad fuel tank means a fuel tank that meets each of the following criteria:

(1) It has design features indicative of use in portable applications, such as a carrying handle and fuel line fitting that can be readily attached to and detached from a nonroad engine.

(2) It has a nominal fuel capacity of 12 gallons or less.

(3) It is designed to supply fuel to an engine while the engine is operating.

(4) It is not used or intended to be used to supply fuel to a marine engine. Note that portable tanks excluded from this definition of ''portable nonroad fuel tank'' under this paragraph (4) because of their use with marine engines are portable marine fuel tanks.

* * * * *

Small SI means relating to engines that are subject to emission standards in 40 CFR part 1054.

* * * * *

■ 302. Amend § 1060.810 by:

■ a. Removing and reserving paragraph (d); and

■ b. Revising paragraph (e) introductory text.

The revision reads read as follows:

§ 1060.810 What materials does this part reference?

* * * * *

(d) [Reserved]

(e) *American Boat and Yacht Council Material.* The following documents are available from the American Boat and Yacht Council, 613 Third Street, Suite 10, Annapolis, MD 21403 or (410) 990–4460 or *http://abycinc.org/*:

* * * * *

■ 303. Revise § 1060.815 to read as follows:

§ 1060.815 What provisions apply to confidential information?

The provisions of 40 CFR 1068.10 apply for information you consider confidential.

■ 304. Revise § 1060.825 to read as follows:

§ 1060.825 What reporting and recordkeeping requirements apply under this part?

(a) This part includes various requirements to submit and record data or other information. Unless we specify otherwise, store required records in any format and on any media and keep them readily available for eight years after you send an associated application for certification, or eight years after you generate the data if they do not support an application for certification. We may request these records at any time. You must promptly give us organized, written records in English if we ask for them. This applies whether or not you rely on someone else to keep records on your behalf. We may require you to submit written records in an electronic format.

(b) The regulations in § 1045.255, 40 CFR 1068.25, and 40 CFR 1068.101 describe your obligation to report truthful and complete information. This includes information not related to certification. Failing to properly report information and keep the records we specify violates 40 CFR 1068.101(a)(2), which may involve civil or criminal penalties.

(c) Send all reports and requests for approval to the Designated Compliance Officer (see § 1060.801).

(d) Any written information we require you to send to or receive from

another company is deemed to be a required record under this section. Such records are also deemed to be submissions to EPA. We may require you to send us these records whether or not you are a certificate holder.

(e) Under the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*), the Office of Management and Budget approves the reporting and recordkeeping specified in the applicable regulations. The following items illustrate the kind of reporting and recordkeeping we require for products regulated under this part:

(1) We specify the following requirements related to component and equipment certification in this part 1060:

(i) In § 1060.20 we give an overview of principles for reporting information.

(ii) In subpart C of this part we identify a wide range of information required to certify engines.

(ii) In § 1060.301 we require manufacturers to make components, engines, or equipment available for our testing if we make such a request, and to keep records related to evaluation of production samples for verifying that the products are as specified in the certificate of conformity.

(iv) In § 1060.505 we specify information needs for establishing various changes to published test procedures.

(2) We specify the following requirements related to the general compliance provisions in 40 CFR part 1068:

(i) In 40 CFR 1068.5 we establish a process for evaluating good engineering judgment related to testing and certification.

(ii) In 40 CFR 1068.25 we describe general provisions related to sending and keeping information.

(iii) In 40 CFR 1068.27 we require manufacturers to make equipment available for our testing or inspection if we make such a request.

(iv) In 40 CFR 1068.105 we require equipment manufacturers to keep certain records related to duplicate labels from engine manufacturers.

(v) [Reserved]

(vi) In 40 CFR part 1068, subpart C, we identify several reporting and recordkeeping items for making demonstrations and getting approval related to various exemptions.

(vii) In 40 CFR part 1068, subpart D, we identify several reporting and recordkeeping items for making demonstrations and getting approval related to importing equipment.

(viii) In 40 CFR 1068.450 and 1068.455 we specify certain records related to testing production-line products in a selective enforcement audit.

(ix) In 40 CFR 1068.501 we specify certain records related to investigating and reporting emission-related defects.

(x) In 40 CFR 1068.525 and 1068.530 we specify certain records related to recalling nonconforming equipment.

(xi) In 40 CFR part 1068, subpart G, we specify certain records for requesting a hearing.

PART 1065—ENGINE–TESTING PROCEDURES

■ 305. The authority statement for part 1065 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 306. Amend § 1065.1 by revising paragraph (g) to read as follows:

§ 1065.1 Applicability.

* * * * *

(g) For additional information regarding these test procedures, visit our website at *www.epa.gov*, and in particular *https://www.epa.gov/vehicle-and-fuel-emissions-testing/engine-testing-regulations*.

* * * * *

■ 307. Amend § 1065.130 by revising paragraph (e) to read as follows:

§ 1065.130 Engine exhaust.

* * * * *

(e) *Leaks.* Minimize leaks sufficiently to ensure your ability to demonstrate compliance with the applicable standards. We recommend performing a carbon balance error verification as described in § 1065.543 to verify exhaust system integrity.

* * * * *

■ 308. Amend § 1065.140 by revising paragraphs (c)(6)(i) and (e)(2) to read as follows:

§ 1065.140 Dilution for gaseous and PM constituents.

* * * * *

(c) * * *

(6) * * *

(i) *Preventing aqueous condensation.* To prevent condensation, you must keep the temperature of internal surfaces, excluding any sample probes, above the dewpoint of the dilute exhaust passing through the CVS tunnel. Use good engineering judgment to monitor temperatures in the CVS. For the purposes of this paragraph (c)(6), assume that aqueous condensation is pure water condensate only, even though the definition of ''aqueous condensation'' in § 1065.1001 includes condensation of any constituents that contain water. No specific verification check is required under this paragraph (c)(6)(i), but we may ask you to show how you comply with this requirement. You may use engineering analysis, CVS tunnel design, alarm systems, measurements of wall temperatures, and calculation of water dewpoint to demonstrate compliance with this requirement. For optional CVS heat exchangers, you may use the lowest water temperature at the inlet(s) and outlet(s) to determine the minimum internal surface temperature.

* * * * *

(e) * * *

(2) For any PM dilution system (*i.e.,* CVS or PFD), add dilution air to the raw exhaust such that the minimum overall ratio of diluted exhaust to raw exhaust is within the range of (5:1 to 7:1) and is at least 2:1 for any primary dilution stage. Base this minimum value on the maximum engine exhaust flow rate for a given test interval. For discrete mode testing, base the minimum value on the maximum engine exhaust flow rate for a given duty-cycle. Either measure the maximum exhaust flow during a practice run of the test interval or estimate it based on good engineering judgment (for example, you might rely on manufacturer-published literature).

* * * * *

■ 309. Amend § 1065.145 by revising paragraph (e)(3)(i) to read as follows:

§ 1065.145 Gaseous and PM probes, transfer lines, and sampling system components.

* * * * *

(e) * * *

(3) * * *

(i) If you use a NO_X sample pump upstream of either an NO_2-to-NO converter that meets § 1065.378 or a chiller that meets § 1065.376, design the sampling system to prevent aqueous condensation.

* * * * *

■ 310. Amend § 1065.170 by revising the introductory text and paragraph (a)(1) to read as follows:

§ 1065.170 Batch sampling for gaseous and PM constituents.

Batch sampling involves collecting and storing emissions for later analysis. Examples of batch sampling include collecting and storing gaseous emissions in a bag or collecting and storing PM on a filter. You may use batch sampling to store emissions that have been diluted at least once in some way, such as with CVS, PFD, or BMD. You may use batch-sampling to store undiluted emissions. You may stop emission sampling anytime the engine is turned off, consistent with good engineering judgment. This is intended to allow for higher concentrations of dilute exhaust gases and more accurate measurements.

Take steps to account for exhaust transport delay in the sampling system and be sure to integrate over the actual sampling duration when determining $n_{dexh.}$ Use good engineering judgement to add additional dilution air, as needed, to fill bags up to minimum read volumes.

(a) * * *

(1) Verify proportional sampling after an emission test as described in § 1065.545. You may exclude segments where the bag is not being filled from the proportional sampling verification. Use good engineering judgment to select storage media that will not significantly change measured emission levels (either up or down). For example, do not use sample bags for storing emissions if the bags are permeable with respect to emissions or if they off gas emissions to the extent that it affects your ability to demonstrate compliance with the applicable gaseous emission standards. As another example, do not use PM filters that irreversibly absorb or adsorb gases to the extent that it affects your ability to demonstrate compliance with the applicable PM emission standard.

* * * * *

■ 311. Revise § 1065.205 to read as follows:

§ 1065.205 Performance specifications for measurement instruments.

Your test system as a whole must meet all the calibrations, verifications, and test-validation criteria specified outside this section for laboratory testing or field testing, as applicable. We recommend that your instruments meet the specifications in this section for all ranges you use for testing. We also recommend that you keep any documentation you receive from instrument manufacturers showing that your instruments meet the specifications in the following table:

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TABLE 1 OF § 1065.205–RECOMMENDED PERFORMANCE SPECIFICATIONS FOR MEASUREMENT INSTRUMENTS

Measurement Instrument	Measured quantity symbol	Complete System Rise time ($t_{10\text{-}90}$) and Fall time ($t_{90\text{-}10}$)[a]	Recording update frequency	Accuracy[b]	Repeatability[b]	Noise[b]
Engine speed transducer	f_n	1 s	1 Hz means	2 % of pt. or 0.5 % of max.	1 % of pt. or 0.25 % of max.	0.05 % of max
Engine torque transducer	T	1 s	1 Hz means	2 % of pt. or 1 % of max.	1 % of pt. or 0.5 % of max	0.05 % of max.
Electrical work (active-power meter)	W	1 s	1 Hz means	2 % of pt. or 0.5 % of max.	1 % of pt. or 0.25 % of max.	0.05 % of max
General pressure transducer (not a part of another instrument)	p	5 s	1 Hz	2 % of pt. or 1 % of max.	1 % of pt. or 0.5 % of max.	0.1 % of max
Atmospheric pressure meter for PM-stabilization and balance environments	p_{atmos}	50 s	5 times per hour	50 Pa	25 Pa	5 Pa
General purpose atmospheric pressure meter	p_{atmos}	50 s	5 times per hour	250 Pa	100Pa	50 Pa
Temperature sensor for PM-stabilization and balance environments	T	50 s	0.1 Hz	0.25 K	0.1 K	0.1 K
Other temperature sensor (not a part of another instrument)	T	10 s	0.5 Hz	0.4 % of pt. K or 0.2 % of max. K	0.2 % of pt. K or 0.1 % of max. K	0.1 % of max
Dewpoint sensor for intake air, PM-stabilization and balance environments	T_{dew}	50 s	0.1 Hz	0.25 K	0.1 K	0.02 K
Other dewpoint sensor	T_{dew}	50 s	0.1 Hz	1 K	0.5 K	0.1 K
Fuel mass flow rate meter[c]	$\dot{m}$	5 s	1 Hz	2 % of pt. or 1.5 % of max.	1 % of pt. or 0.75 % of max.	0.5 % of max.
DEF mass flow rate meter[c]	$\dot{m}$	5 s	1 Hz	5 % of pt. or 4 % of max.	2.5 % of pt. or 2 % of max.	1.25 % of max.
Fuel mass scale[d]	m	5 s	1 Hz	0.36 % · m_{max} + 0.25 % · pt.	1.13 % · m_{max}	4.4 % · m_{max}
DEF mass scale[d]	m	5 s	1 Hz	0.36 % · m_{max} + 0.25 % · pt.	1.13 % · m_{max}	4.4 % · m_{max}
Total diluted exhaust meter (CVS)[c] (With heat exchanger before meter)	$\dot{n}$	1 s (5 s)	1 Hz means (1 Hz)	2 % of pt. or 1.5 % of max.	1 % of pt. or 0.75 % of max.	1 % of max.
Dilution air, inlet air, exhaust, and sample flow meters[c]	$\dot{n}$	1 s	1 Hz means of 5 Hz samples	2.5 % of pt. or 1.5 % of max.	1.25 % of pt. or 0.75 % of max.	1 % of max.
Continuous gas analyzer	x	5 s	1 Hz	2 % of pt. or 2 % of meas.	1 % of pt. or 1 % of meas.	1 % of max.
Batch gas analyzer	x	—	—	2 % of pt. or 2 % of meas.	1 % of pt. or 1 % of meas.	1 % of max.
Gravimetric PM balance	m_{PM}	—	—	See § 1065.790	0.5 µg	—
Inertial PM balance	m_{PM}	5 s	1 Hz	2 % of pt. or 2 % of meas.	1 % of pt. or 1 % of meas.	0.2 % of max.

[a] The performance specifications identified in the table apply separately for rise time and fall time.

[b] Accuracy, repeatability, and noise are all determined with the same collected data, as described in § 1065.305, and based on absolute values. "pt." refers to the overall flow-weighted mean value expected at the standard; "max." refers to the peak value expected at the standard over any test interval, not the maximum of the instrument's range; "meas" refers to the actual flow-weighted mean measured over any test interval.

[c] The procedure for accuracy, repeatability and noise measurement described in § 1065.305 may be modified for flow meters to allow noise to be measured at the lowest calibrated value instead of zero flow rate.

[d] For these quantities, the values that are to be used for the limit requirements are differential mass over the test interval as described in paragraphs §1065.307(e)(9).

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■ 312. Amend § 1065.220 by revising paragraph (a) to read as follows:

§ 1065.220 Fuel flow meter.

(a) *Application.* You may use fuel flow meters in combination with a chemical balance of fuel, DEF, intake air, and raw exhaust to calculate raw exhaust flow as described in § 1065.655(f), and to determine the mass of carbon-carrying fuel streams input to the carbon balance error verification in § 1065.543 as follows:

(1) Use the actual value of calculated raw exhaust flow rate in the following cases:

(i) For multiplying raw exhaust flow rate with continuously sampled concentrations.

(ii) For multiplying total raw exhaust flow with batch-sampled concentrations.

(iii) For calculating the dilution air flow for background correction as described in § 1065.667.

(2) In the following cases, you may use a fuel flow meter signal that does not give the actual value of raw exhaust, as long as it is linearly proportional to the exhaust molar flow rate's actual calculated value:

(i) For feedback control of a proportional sampling system, such as a partial-flow dilution system.

(ii) For multiplying with continuously sampled gas concentrations, if the same signal is used in a chemical-balance calculation to determine work from brake-specific fuel consumption and fuel consumed.

(3) You may use fuel flow meters to calculate the mass of carbon-carrying fuel streams as described in § 1065.643.

* * * * *

■ 313. Amend § 1065.225 by revising paragraph (a) to read as follows:

§ 1065.225 Intake-air flow meter.

(a) *Application.* You may use intake-air flow meters in combination with a chemical balance of fuel, DEF, intake air, and exhaust to calculate raw exhaust flow as described in § 1065.655(f) and (g), and to determine the measured amount of intake air input to the carbon balance error verification described in § 1065.543 as follows:

(1) Use the actual value of calculated raw exhaust in the following cases:

(i) For multiplying raw exhaust flow rate with continuously sampled concentrations.

(ii) For multiplying total raw exhaust flow with batch-sampled concentrations.

(iii) For verifying minimum dilution ratio for PM batch sampling as described in § 1065.546.

(iv) For calculating the dilution air flow for background correction as described in § 1065.667.

(2) In the following cases, you may use an intake-air flow meter signal that does not give the actual value of raw exhaust, as long as it is linearly proportional to the exhaust flow rate's actual calculated value:

(i) For feedback control of a proportional sampling system, such as a partial-flow dilution system.

(ii) For multiplying with continuously sampled gas concentrations, if the same signal is used in a chemical-balance calculation to determine work from brake-specific fuel consumption and fuel consumed.

(3) You may use intake-air flow meters to calculate $n_{int,}$ the measured amount of intake air as described in § 1065.643.

* * * * *

■ 314. Amend § 1065.247 by revising paragraph (c)(2) to read as follows:

§ 1065.247 Diesel exhaust fluid flow rate.

* * * * *

(c) * * *

(2) Account for any fluid that bypasses the diesel exhaust fluid dosing unit or returns from the dosing unit to the fluid storage tank.

* * * * *

■ 315. Amend § 1065.260 by revising paragraph (e) to read as follows:

§ 1065.260 Flame-ionization detector.

* * * * *

(e) *NMHC and NMOG.* For demonstrating compliance with NMHC standards, you may either measure THC and determine NMHC mass as described in § 1065.660(b)(1), or you may measure THC and CH_4 and determine NMHC as described in § 1065.660(b)(2) or (3). For some gaseous-fueled engines, you may also use the additive method in § 1065.660(b)(4). See 40 CFR 1066.635 for methods to demonstrate compliance with NMOG standards for vehicle testing.

* * * * *

■ 316. Amend § 1065.266 by revising paragraphs (a) and (b) to read as follows:

§ 1065.266 Fourier transform infrared analyzer.

(a) *Application.* For engines that run only on natural gas, you may use a Fourier transform infrared (FTIR) analyzer to measure nonmethane hydrocarbon (NMHC) and nonmethane-nonethane hydrocarbon (NMNEHC) for continuous sampling. You may use an FTIR analyzer with any gaseous-fueled engine, including dual-fuel and flexible-fuel engines, to measure CH_4 and C_2H_6, for either batch or continuous sampling (for subtraction from THC).

(b) *Component requirements.* We recommend that you use an FTIR analyzer that meets the specifications in Table 1 of § 1065.205. Note that your FTIR-based system must meet the linearity verification in § 1065.307. Use appropriate analytical procedures for interpretation of infrared spectra. For example, EPA Test Method 320 (see *https://www.epa.gov/emc/method-320-vapor-phase-organic-and-inorganic-emissions-extractive-ftir*) and ASTM D6348 (incorporated by reference in § 1065.1010) are considered valid methods for spectral interpretation. You must use heated FTIR analyzers that maintain all surfaces that are exposed to emissions at a temperature of (110 to 202) °C.

* * * * *

■ 317. Amend § 1065.275 by revising paragraph (b)(2) to read as follows:

§ 1065.275 N_2O measurement devices.

* * * * *

(b) * * *

(2) Fourier transform infrared (FTIR) analyzer. Use appropriate analytical procedures for interpretation of infrared spectra. For example, EPA Test Method 320 (see § 1065.266(b)) and ASTM D6348 (incorporated by reference in § 1065.1010) are considered valid methods for spectral interpretation.

* * * * *

■ 318. Amend § 1065.280 by revising paragraph (a) to read as follows:

§ 1065.280 Paramagnetic and magnetopneumatic O_2 detection analyzers.

(a) *Application.* You may use a paramagnetic detection (PMD) or magnetopneumatic detection (MPD) analyzer to measure O_2 concentration in raw or diluted exhaust for batch or continuous sampling. You may use good engineering judgment to develop calculations that use O_2 measurements with a chemical balance of fuel, DEF, inlet intake air, and exhaust to calculate exhaust flow rate.

* * * * *

■ 319. Revise § 1065.303 to read as follows:

§ 1065.303 Summary of required calibration and verifications.

The following table summarizes the required and recommended calibrations and verifications described in this subpart and indicates when these have to be performed:

TABLE 1 OF § 1065.303—SUMMARY OF REQUIRED CALIBRATION AND VERIFICATIONS

Type of calibration or verification	Minimum frequency [a]
§ 1065.305: Accuracy, repeatability and noise	*Accuracy:* Not required, but recommended for initial installation. Repeatability: Not required, but recommended for initial installation. *Noise:* Not required, but recommended for initial installation.
§ 1065.307: Linearity verification	*Speed:* Upon initial installation, within 370 days before testing and after major maintenance. *Torque:* Upon initial installation, within 370 days before testing and after major maintenance. *Electrical power, current, and voltage:* Upon initial installation, within 370 days before testing and after major maintenance.[b] *Fuel mass flow rate:* Upon initial installation, within 370 days before testing, and after major maintenance. *Fuel mass scale:* Upon initial installation, within 370 days before testing, and after major maintenance. *DEF mass flow rate:* Upon initial installation, within 370 days before testing, and after major maintenance.[c] *DEF mass scale:* Upon initial installation, within 370 days before testing, and after major maintenance. *Intake-air, dilution air, diluted exhaust, and batch sampler flow rates:* Upon initial installation, within 370 days before testing and after major maintenance.[d] *Raw exhaust flow rate:* Upon initial installation, within 185 days before testing and after major maintenance.[d] *Gas dividers:* Upon initial installation, within 370 days before testing, and after major maintenance. *Gas analyzers (unless otherwise noted):* Upon initial installation, within 35 days before testing and after major maintenance. *FTIR and photoacoustic analyzers:* Upon initial installation, within 370 days before testing and after major maintenance. *GC–ECD:* Upon initial installation and after major maintenance. *PM balance:* Upon initial installation, within 370 days before testing and after major maintenance. *Pressure, temperature, and dewpoint:* Upon initial installation, within 370 days before testing and after major maintenance.
§ 1065.308: Continuous gas analyzer system response and updating-recording verification—for gas analyzers not continuously compensated for other gas species.	Upon initial installation or after system modification that would affect response.
§ 1065.309: Continuous gas analyzer system-response and updating-recording verification—for gas analyzers continuously compensated for other gas species.	Upon initial installation or after system modification that would affect response.
§ 1065.310: Torque	Upon initial installation and after major maintenance.
§ 1065.315: Pressure, temperature, dewpoint	Upon initial installation and after major maintenance.
§ 1065.320: Fuel flow	Upon initial installation and after major maintenance.
§ 1065.325: Intake flow	Upon initial installation and after major maintenance.
§ 1065.330: Exhaust flow	Upon initial installation and after major maintenance.
§ 1065.340: Diluted exhaust flow (CVS)	Upon initial installation and after major maintenance.
§ 1065.341: CVS and PFD flow verification (propane check)	CVS and PFD used for sampling gaseous emissions: Upon initial installation, within 35 days before testing, and after major maintenance.[e]
§ 1065.342 Sample dryer verification	For thermal chillers: upon installation and after major maintenance. For osmotic membranes; upon installation, within 35 days of testing, and after major maintenance.
§ 1065.345: Vacuum leak	For laboratory testing: upon initial installation of the sampling system, within 8 hours before the start of the first test interval of each duty-cycle sequence, and after maintenance such as pre-filter changes. For field testing: after each installation of the sampling system on the vehicle, prior to the start of the field test, and after maintenance such as pre-filter changes.
§ 1065.350: CO_2 NDIR H_2O interference	Upon initial installation and after major maintenance.
§ 1065.355: CO NDIR CO_2 and H_2O interference	Upon initial installation and after major maintenance.
§ 1065.360: FID calibration THC FID optimization, and THC FID verification.	Calibrate all FID analyzers: upon initial installation and after major maintenance. Optimize and determine CH_4 response for THC FID analyzers:upon initial installation and after major maintenance. Verify CH_4 response for THC FID analyzers: upon initial installation, within 185 days before testing, and after major maintenance. Verify C_2H_6 response for THC FID analyzers if used for NMNEHC determination: upon initial installation, within 185 days before testing, and after major maintenance.
§ 1065.362: Raw exhaust FID O_2 interference	For all FID analyzers: upon initial installation, and after major maintenance. For THC FID analyzers: upon initial installation, after major maintenance, and after FID optimization according to § 1065.360.

TABLE 1 OF § 1065.303—SUMMARY OF REQUIRED CALIBRATION AND VERIFICATIONS—Continued

Type of calibration or verification	Minimum frequency [a]
§ 1065.365: Nonmethane cutter penetration	Upon initial installation, within 185 days before testing, and after major maintenance.
§ 1065.366: Interference verification for FTIR analyzers	Upon initial installation and after major maintenance.
§ 1065.369: H_2O, CO, and CO_2 interference verification for ethanol photoacoustic analyzers.	Upon initial installation and after major maintenance.
§ 1065.370: CLD CO_2 and H_2O quench	Upon initial installation and after major maintenance.
§ 1065.372: NDUV HC and H_2O interference	Upon initial installation and after major maintenance.
§ 1065.375: N_2O analyzer interference	Upon initial installation and after major maintenance.
§ 1065.376: Chiller NO_2 penetration	Upon initial installation and after major maintenance.
§ 1065.378: NO_2-to-NO converter conversion	Upon initial installation, within 35 days before testing, and after major maintenance.
§ 1065.390: PM balance and weighing	Independent verification: upon initial installation, within 370 days before testing, and after major maintenance. Zero, span, and reference sample verifications: within 12 hours of weighing, and after major maintenance.
§ 1065.395: Inertial PM balance and weighing	Independent verification: upon initial installation, within 370 days before testing, and after major maintenance. Other verifications: upon initial installation and after major maintenance.

[a] Perform calibrations and verifications more frequently than we specify, according to measurement system manufacturer instructions and good engineering judgment.
[b] Perform linearity verification either for electrical power or for current and voltage.
[c] The linearity verification is not required if DEF flow rate from the ECM is used as described in § 1065.247(b).
[d] The linearity verification is not required if the accuracy of the flow signal is verified by a propane check as described in § 1065.341 or by a carbon balance error verification as described in § 1065.307(e)(5).
[e] The CVS and PFD flow verification (propane check) is not required for measurement systems that are verified by a carbon balance error verification as described in § 1065.341(h).

■ 320. Amend § 1065.307 by:
■ a. Revising paragraphs (c)(13), (d)(4), (d)(6), (d)(7), (d)(9), (e)(3), (e)(5), (e)(7)(i);
■ b. In paragraph (e)(8)(ii)(B) removing Table 1 to § 1065.307; and
■ c. Adding paragraphs (f) and (g).

The revisions and additions read as follows:

§ 1065.307 Linearity verification.

* * * * *

(c) * * *

(13) Use the arithmetic means, $\bar{y}$; and reference values, y_{refi}, to calculate least-squares linear regression parameters and statistical values to compare to the minimum performance criteria specified in Table 1 of this section. Use the calculations for a floating intercept described in § 1065.602. Using good engineering judgment, you may weight the results of individual data pairs (*i.e.,* (y_{refi}, $\bar{y}_i$)), in the linear regression calculations.

(d) * * *

(4) *Fuel or DEF mass flow rate.* Use a gravimetric reference measurement (such as a scale, balance, or mass comparator) and a container. Use a stopwatch or timer to measure the time intervals over which reference masses of fluid pass through the mass flow meter. Use good engineering judgement to correct the reference mass that flowed through the mass flow meter for buoyancy effects including any tubes, temperature probes, or objects submerged in the fluid in the container and not attached to the container. If the container has any tubes or wires connected to the container, recalibrate the gravimetric reference measurement device with them connected and at normal operating pressure using calibration weights that meet the requirements in § 1065.790. The corrected reference mass that flowed through the mass flow meter divided by the time interval is the average reference mass flow rate. For meters that report a different quantity (such as actual volume, standard volume, or mole), convert the reported quantity to mass. For meters that report cumulative mass (or other quantity), calculate the average measured mass flow rate as the difference in the reported cumulative mass from the beginning to the end of the time interval divided by the time interval. For gaseous fuel flow meters, prevent condensation on the fuel container and any tubes, fittings, or regulators attached to the fuel container.

* * * * *

(6) *Gas division.* Use one of the two reference signals:

(i) At the outlet of the gas-division system, connect a gas analyzer that meets the linearity verification described in this section and has not been linearized with the gas divider being verified. For example, verify the linearity of an analyzer using a series of reference analytical gases directly from compressed gas cylinders that meet the specifications of § 1065.750. We recommend using a FID analyzer or a PMD or MPD O_2 analyzer because of their inherent linearity. Operate this analyzer consistent with how you would operate it during an emission test. Connect a span gas containing only a single constituent of interest with balance of purified air or nitrogen to the gas-divider inlet. Use the gas-division system to divide the span gas with purified air or nitrogen. Select gas divisions that you typically use. Use a selected gas division as the measured value. Use the analyzer response divided by the span gas concentration as the reference gas-division value. Because the instrument response is not absolutely constant, sample and record values of x_{refi} for 30 seconds and use the arithmetic mean of the values, $\bar{x}_{ref}$, as the reference value. Refer to § 1065.602 for an example of calculating arithmetic mean.

(ii) Using good engineering judgment and the gas divider manufacturer's recommendations, use one or more reference flow meters to measure the flow rates of the gas divider and verify the gas-division value.

(7) *Continuous constituent concentration.* For reference values, use a series of gas cylinders of known gas concentration containing only a single constituent of interest with balance of purified air or nitrogen or use a gas-division system that is known to be linear with a span gas. Gas cylinders, gas-division systems, and span gases

that you use for reference values must meet the specifications of § 1065.750.

* * * * *

(9) *Mass.* For linearity verification for gravimetric PM balances and fuel mass scales, and DEF mass scales, use external calibration weights that meet the requirements in § 1065.790. Perform the linearity verification for fuel and DEF mass scales with the in-use container and all objects that interface with the container installed. Include all tubes, temperature probes, and objects submerged in the fluid in the container and all tubes, fittings, regulators, and wires, etc. attached to the container. If the container is vented to ambient, fill the container and tubes with fluid above the minimum level used to trigger a fill operation; drain the fluid down to the minimum level; tare the scale; and perform the linearity verification. If the container is rigid and not vented, drain the fluid down to the minimum level; fill all tubes attached to the container to normal operating pressure; tare the scale; and perform the linearity verification. We recommend that you use good engineering judgement to develop and apply appropriate buoyancy corrections for the configuration of your mass scale during normal testing. During the linearity verification, configure this buoyancy correction to account for the fact that the scale is weighing a calibration weight instead of fluid. You may develop corrections in your mass scales for the effect of natural convection currents generated by temperature differences between the fluid container and ambient air.

(e) * * *

(3) The expression ''max'' generally refers to the absolute value of the reference value used during linearity verification that is furthest from zero. This is the value used to scale the first and third tolerances in Table 1 of this section using a_0 and *SEE.* For example, if the reference values chosen to validate a pressure transducer vary from −10 to −1 kPa, then p_{max} is +10 kPa. If the reference values used to validate a temperature device vary from 290 to 390 K, then T_{max} is 390 K. For gas dividers where ''max'' is expressed as, x_{max}/x_{span}; x_{max} is the maximum gas concentration used during the verification, x_{span} is the undivided, undiluted, span gas concentration, and the resulting ratio is the maximum divider point reference value used during the verification (typically 1). The following are special cases where ''max'' refers to a different value:

(i) For linearity verification of a PM balance, m_{max} is the typical mass of a PM filter.

(ii) For linearity verification of a torque measurement system used to determine the engine's primary output shaft, T_{max} is the manufacturer's specified engine torque peak value of the lowest torque engine expected during testing.

(iii) For linearity verification of a fuel mass scale, m_{max} is determined based on the range of engines and test interval durations expected during testing. It is the minimum, over all engines expected during testing, of the fuel consumption expected over the minimum test interval duration at the engine's maximum fuel rate. If the minimum test interval duration used during testing does not change with engine power or if the minimum test interval duration used during testing increases with engine power, m_{max} is given by Eq. 1065.307–1.

$$m_{\text{max,fuel scale}} = \dot{m}_{\text{max,fuel}} \cdot t_{\min}$$

Eq. 1065.307-1

Where:

$\dot{m}_{\text{max,fuel}}$ = the manufacturer's specified maximum fuel rate on the lowest power engine expected during testing.

$t_{\min}$ = the minimum test interval duration expected during testing. If the minimum test interval duration used during testing decreases with engine power, evaluate Eq. 1065.307–1 for the range of engines expected during testing and use the minimum $m_{\text{max,fuel scale}}$.

(iv) For linearity verification of a DEF mass scale, m_{max} is 10% of m_{max} for a fuel mass scale, as determined in paragraph (e)(3)(iii) of this section. For purposes of determining m_{max} for a DEF mass scale, you may evaluate m_{max} for a fuel mass scale based only on the DEF-using engines expected during testing.

(v) For linearity verification of a fuel flow rate meter, $\dot{m}_{max}$ is the manufacturer's specified maximum fuel rate of the lowest power engine expected during testing.

(vi) For linearity verification of a DEF flow rate meter, $\dot{m}_{max}$ is 10% of the manufacturer's specified maximum fuel rate of the lowest power, DEF-using, engine expected during testing.

(vii) For linearity verification of an intake-air flow rate meter, $\dot{n}_{max}$ is the manufacturer's specified maximum intake-air flow rate (converted to molar flow rate) of the lowest power engine expected during testing.

(viii) For linearity verification of a raw exhaust flow rate meter, $\dot{n}_{max}$ is the manufacturer's specified maximum exhaust flow rate (converted to molar flow rate) of the lowest power engine expected during testing.

(ix) For linearity verification of an electrical power measurement system used to determine the engine's primary output shaft torque, P_{max} is the manufacturer's specified maximum power of the lowest power engine expected during testing.

(x) For linearity verification of an electrical current measurement system used to determine the engine's primary output shaft torque, I_{max} is the maximum current expected on the lowest power engine expected during testing.

(xi) For linearity verification of an electrical voltage measurement system used to determine the engine's primary output shaft torque, V_{max} is the minimum peak voltage expected on the range of engines expected during testing.

* * * * *

(5) Table 2 of this section lists the flow measurement systems that have optional verifications to the linearity verification. If you substitute the propane check verification described in § 1065.341, it must be performed at the frequency specified in Table 1 of § 1065.303. If you substitute the carbon balance verification described in § 1065.543, it must be performed on all test sequences that use the corresponding system and it must meet the restrictions listed in Table 2 of this section. You may evaluate the carbon balance verification multiple ways with different inputs to validate multiple flow measurement systems.

* * * * *

(7) * * *

(i) The following temperature measurements always require linearity verification:

(A) Air intake.

(B) Aftertreatment bed(s), for engines tested with aftertreatment devices subject to cold-start testing.

(C) Dilution air for gaseous and PM sampling, including CVS, double-dilution, and partial-flow systems.

(D) PM sample.

(E) Chiller sample, for gaseous sampling systems that use thermal chillers to dry samples and use chiller temperature to calculate the dewpoint at the outlet of the chiller. For your testing, if you choose to use a high alarm temperature setpoint for the chiller temperature as a constant value in determining the amount of water removed from the emission sample, you may use good engineering judgment to verify the accuracy of the high alarm temperature setpoint instead of linearity verification on the chiller temperature.

To verify that the alarm trip point value is no less than 2.0 °C below the reference value at the trip point, we recommend that you input a reference simulated temperature signal below the alarm trip point and increase this signal until the high alarm trips.

(F) Transmission oil.

(G) Axle gear oil.

* * * * *

(f) Table 1 follows:

TABLE 1 OF § 1065.307—MEASUREMENT SYSTEMS THAT REQUIRE LINEARITY VERIFICATION

Measurement system	Quantity	Linearity criteria			
		$\lvert x_{min}(a_1-1)+a_0\rvert$	a_1	*SEE*	r^2
Speed	f_n	$\leq 0.05\% \cdot f_{nmax}$	0.98–1.02	$\leq 2\% \cdot f_{nmax}$	≥0.990
Torque	T	$\leq 1\% \cdot T_{max}$	0.98–1.02	$\leq 2\% \cdot T_{max}$	≥0.990
Electrical power	P	$\leq 1\% \cdot P_{max}$	0.98–1.02	$\leq 2\% \cdot P_{max}$	≥0.990
Current	I	$\leq 1\% \cdot I_{max}$	0.98–1.02	$\leq 2\% \cdot I_{max}$	≥0.990
Voltage	U	$\leq 1\% \cdot U_{max}$	0.98–1.02	$\leq 2\% \cdot U_{max}$	≥0.990
Fuel flow rate	$\dot{m}$	$\leq 1\% \cdot \dot{m}_{max}$	0.98–1.02	$\leq 2\% \cdot \dot{m}_{max}$	≥0.990
Fuel mass scale	m	$\leq 0.3\% \cdot m_{max}$	0.996–1.004	$\leq 0.4\% \cdot m_{max}$	≥0.999
DEF flow rate	$\dot{m}$	$\leq 1\% \cdot \dot{m}_{max}$	0.98–1.02	$\leq 2\% \cdot \dot{m}_{max}$	≥ 0.990
DEF mass scale	m	$\leq 0.3\% \cdot m_{max}$	0.996–1.004	$\leq 0.4\% \cdot m_{max}$	≥0.999
Intake-air flow rate [a]	$\dot{n}$	$\leq 1\% \cdot \dot{n}_{max}$	0.98–1.02	$\leq 2\% \cdot \dot{n}_{max}$	≥ 0.990
Dilution air flow rate [a]	$\dot{n}$	$\leq 1\% \cdot \dot{n}_{max}$	0.98–1.02	$\leq 2\% \cdot \dot{n}_{max}$	≥0.990
Diluted exhaust flow rate [a]	$\dot{n}$	$\leq 1\% \cdot \dot{n}_{max}$	0.98–1.02	$\leq 2\% \cdot \dot{n}_{max}$	≥0.990
Raw exhaust flow rate [a]	$\dot{n}$	$\leq 1\% \cdot \dot{n}_{max}$	0.98–1.02	$\leq 2\% \cdot \dot{n}_{max}$	≥0.990
Batch sampler flow rates [a]	$\dot{n}$	$\leq 1\% \cdot \dot{n}_{max}$	0.98–1.02	$\leq 2\% \cdot \dot{n}_{max}$	≥0.990
Gas dividers	x/x_{span}	$\leq 0.5\% \cdot x_{max}/x_{span}$	0.98–1.02	$\leq 2\% \cdot x_{max}/x_{span}$	≥0.990
Gas analyzers for laboratory testing	x	$\leq 0.5\% \cdot x_{max}$	0.99–1.01	$\leq 1\% \cdot x_{max}$	≥0.998
Gas analyzers for field testing	x	$\leq 1\% \cdot x_{max}$	0.99–1.01	$\leq 1\% \cdot x_{max}$	≥0.998
PM balance	m	$\leq 1\% \cdot m_{max}$	0.99–1.01	$\leq 1\% \cdot m_{max}$	≥0.998
Pressures	p	$\leq 1\% \cdot p_{max}$	0.99–1.01	$\leq 1\% \cdot p_{max}$	≥0.998
Dewpoint for intake air, PM-stabilization and balance environments.	T_{dew}	$\leq 0.5\% \cdot T_{dewmax}$	0.99–1.01	$\leq 0.5\% \cdot T_{dewmax}$	≥0.998
Other dewpoint measurements	T_{dew}	$\leq 1\% \cdot T_{dewmax}$	0.99–1.01	$\leq 1\% \cdot T_{dewmax}$	≥0.998
Analog-to-digital conversion of temperature signals.	T	$\leq 1\% \cdot T_{max}$	0.99–1.01	$\leq 1\% \cdot T_{max}$	≥ 0.998

[a] For flow meters that determine volumetric flow rate, $\dot{V}_{std}$, you may substitute $\dot{V}_{std}$ for $\dot{n}$ as the quantity and substitute $\dot{V}_{stdmax}$ for $\dot{n}_{max}$.

(g) Table 2 follows:

TABLE 2 OF § 1065.307—OPTIONAL VERIFICATION TO LINEARITY VERIFICATION

Measurement system	1065.341	1065.543	Restrictions for 1065.543
Intake-air flow rate	Yes	Yes	Intake-air flow rate signal must be used to compute raw exhaust flow rate. Mass of CO_2 over each test interval input into Eq. 1065.643–6 must be determined from samples taken from the raw exhaust (continuous or bag, and with or without a PFD).
Dilution air flow rate for CVS.	Yes	No	Not allowed.
Diluted exhaust flow rate for CVS.	Yes	Yes	Mass of CO_2 over each test interval input into Eq. 1065.643–6 must be determined from samples taken from the CVS (continuous or bag, and with or without a PFD).
Raw exhaust flow rate for exhaust stack.	Yes	Yes	Mass of CO_2 over each test interval input into Eq. 1065.643–6 must be determined from samples taken from the raw exhaust (continuous or bag, and with or without a PFD).
Flow measurements in a PFD (usually dilution air and diluted exhaust streams) used to determine the dilution ratio in the PFD.	Yes	Yes	Mass of CO_2 over each test interval input into Eq. 1065.643–6 must be determined from samples taken from the PFD (continuous or bag).
Batch sampler flow rates	Yes	No	Not allowed.
Fuel mass flow rate	No	Yes	Mass of one of the carbon-carrying fluid streams input into Eq. 1065.643–1 must be determined from the fuel mass flow rate meter.
Fuel mass scale	No	Yes	Mass of one of the carbon-carrying fluid streams input into Eq. 1065.643–1 must be determined from the fuel mass scale.

■ 321. Amend § 1065.309 by revising paragraph (d)(2) to read as follows:

§ 1065.309 Continuous gas analyzer system-response and updating-recording verification—for gas analyzers continuously compensated for other gas species.

* * * * *

(d) * * *

(2) *Equipment setup.* We recommend using minimal lengths of gas transfer lines between all connections and fast-acting three-way valves (2 inlets, 1 outlet) to control the flow of zero and blended span gases to the sample system's probe inlet or a tee near the outlet of the probe. If you inject the gas at a tee near the outlet of the probe, you may correct the transformation time, $t_{50,}$ for an estimate of the transport time from the probe inlet to the tee. Normally the gas flow rate is higher than the sample flow rate and the excess is overflowed out the inlet of the probe. If the gas flow rate is lower than the sample flow rate, the gas concentrations must be adjusted to account for the dilution from ambient air drawn into the probe. We recommend you use the final, stabilized analyzer reading as the final gas concentration. Select span gases for the species being continuously combined, other than H_2O. Select concentrations of compensating species that will yield concentrations of these species at the analyzer inlet that covers the range of concentrations expected during testing. You may use binary or multi-gas span gases. You may use a gas blending or mixing device to blend span gases. A gas blending or mixing device is recommended when blending span gases diluted in N_2 with span gases diluted in air. You may use a multi-gas span gas, such as NO-CO-CO_2-C_3H_8-CH_4, to verify multiple analyzers at the same time. In designing your experimental setup, avoid pressure pulsations due to stopping the flow through the gas blending device. The change in gas concentration must be at least 20% of the analyzer's range. If H_2O correction is applicable, then span gases must be humidified before entering the analyzer; however, you may not humidify NO_2 span gas by passing it through a sealed humidification vessel that contains water. You must humidify NO_2 span gas with another moist gas stream. We recommend humidifying your NO-CO-CO_2-C_3H_8-CH_4, balance N_2 blended gas by flowing the gas mixture through a sealed vessel that humidifies the gas by bubbling it through distilled water and then mixing the gas with dry NO_2 gas, balance purified air or by using a device that injects distilled water as vapor into a controlled span gas flow. If your system does not use a sample dryer to remove water from the sample gas, you must humidify your span gas to the highest sample H_2O content that you estimate during emission sampling. If your system uses a sample dryer during testing, it must pass the sample dryer verification check in § 1065.342, and you must humidify your span gas to an H_2O content greater than or equal to the level determined in § 1065.145(e)(2). If you are humidifying span gases without NO_2, use good engineering judgment to ensure that the wall temperatures in the transfer lines, fittings, and valves from the humidifying system to the probe are above the dewpoint required for the target H_2O content. If you are humidifying span gases with NO_2, use good engineering judgment to ensure that there is no condensation in the transfer lines, fittings, or valves from the point where humidified gas is mixed with NO_2 span gas to the probe. We recommend that you design your setup so that the wall temperatures in the transfer lines, fittings, and valves from the humidifying system to the probe are at least 5 °C above the local sample gas dewpoint. Operate the measurement and sample handling system as you do for emission testing. Make no modifications to the sample handling system to reduce the risk of condensation. Flow humidified gas through the sampling system before this check to allow stabilization of the measurement system's sampling handling system to occur, as it would for an emission test.

* * * * *

■ 322. Amend § 1065.315 by revising paragraph (a)(3) to read as follows:

§ 1065.315 Pressure, temperature, and dewpoint calibration.

(a) * * *

(3) *Dewpoint.* We recommend a minimum of three different temperature-equilibrated and temperature-monitored calibration salt solutions in containers that seal completely around the dewpoint sensor. We recommend using calibration reference quantities that are NIST-traceable within 0.5% *RH* uncertainty.

* * * * *

§ 1065.320 [Revised]

■ 323. Amend § 1065.320 by removing and reserving paragraph (b).

■ 324. Amend § 1065.341 by:

■ a. Revising the section heading;

■ b. Adding introductory text;

■ c. Revising paragraph (a) introductory text and paragraph (g); and

■ d. Adding paragraph (h).

The revisions and additions read as follows:

§ 1065.341 CVS and PFD flow verification (propane check).

This section describes two methods, using propane as a tracer gas, to verify CVS and PFD flow streams. The first method is written for the CVS diluted exhaust flow measurement system. It may be applied to other, single-flow, measurement systems as described in Table 2 of § 1065.307. You may substitute a C_3H_8 analytical gas mixture (*i.e.,* a prediluted tracer gas) for pure C_3H_8 to apply this method to lower flow rates. The analytical gas mixture must meet the specifications in § 1065.750(a)(3). The method described in paragraph (g) of this section may be used to verify the flow measurements in a PFD that are used to determine the dilution ratio in the PFD (usually dilution air and diluted exhaust streams), as it is difficult to scale this method down to the flow rates in a typical PFD using pure propane. You may use good engineering judgment and safe practices to use other tracer gases, such as CO_2 or CO.

(a) A failed propane check might indicate one or more problems that may require corrective action, as follows:

* * * * *

(g) You may verify the flow measurements in a PFD (usually dilution air and diluted exhaust streams) used to determine the dilution ratio in the PFD using the following method:

(1) Configure the HC sampling system to extract a sample from the diluted exhaust stream of the PFD (such as near the location of a PM filter). If the absolute pressure at this location is too low to extract an HC sample, you may sample HC from the PFD system's pump exhaust. Use caution when sampling from pump exhaust because an otherwise acceptable pump leak downstream of a PFD diluted exhaust flow meter will cause a false failure of the propane check.

(2) Perform the propane check described in paragraphs (c), (d), and (e) of this section, but sample HC from the diluted exhaust stream of the PFD. Inject the propane in the same exhaust stream that the PFD is sampling from (either CVS or raw exhaust stack).

(3) Calculate C_3H_8 mass, taking into account the dilution from the PFD.

(4) Subtract the reference C_3H_8 mass from the calculated mass. If this difference is within ±2% of the reference mass, the the flow measurements in a PFD (usually dilution air and diluted exhaust streams) used to determine the dilution ratio in the PFD all pass this verification. If not, take corrective action

as described in paragraph (a) of this section. For PFDs sampling for PM only, the allowed difference is ±5%.

(h) Table 2 of § 1065.307 lists the flow measurement systems that have optional verifications to the linearity verification. The allowances for substituting the carbon balance verification for the linearity verification may also be used to substitute for any required propane checks.

■ 325. Amend § 1065.342 by revising paragraph (d)(2) to read as follows:

§ 1065.342 Sample dryer verification.

* * * * *

(d) * * *

(2) Humidify room air, N_2, or purified air by bubbling it through distilled water in a sealed vessel or use a device that injects distilled water as vapor into a controlled gas flow to humidify the gas to the highest sample water content that you estimate during emission sampling.

* * * * *

■ 326. Amend § 1065.350 by revising paragraph (d)(2) to read as follows:

§ 1065.350 H_2O interference verification for CO_2 NDIR analyzers.

* * * * *

(d) * * *

(2) Create a humidified test gas by bubbling zero gas that meets the specifications in § 1065.750 through distilled H_2O in a sealed vessel or use a device that injects distilled water as vapor into a controlled gas flow. If the sample is not passed through a dryer during emission testing, control the vessel temperature to generate an H_2O level at least as high as the maximum expected during emission testing. If the sample is passed through a dryer during emission testing, control the vessel temperature to generate an H_2O level at least as high as the level determined in § 1065.145(e)(2) for that dryer.

* * * * *

■ 327. Amend § 1065.355 by revising paragraph (d)(2) to read as follows:

§ 1065.355 H_2O and CO_2 interference verification for CO NDIR analyzers.

* * * * *

(d) * * *

(2) Create a humidified CO_2 test gas by bubbling a CO_2 span gas that meets the specifications in § 1065.750 through distilled H_2O in a sealed vessel or use a device that injects distilled water as vapor into a controlled gas flow. If the sample is not passed through a dryer during emission testing, control the vessel temperature to generate an H_2O level at least as high as the maximum expected during emission testing. If the sample is passed through a dryer during emission testing, control the vessel temperature to generate an H_2O level at least as high as the level determined in § 1065.145(e)(2) for that dryer. Use a CO_2 span gas concentration at least as high as the maximum expected during testing.

* * * * *

■ 328. Amend § 1065.360 by adding paragraphs (a)(4) and (d)(12) to read as follows:

§ 1065.360 FID optimization and verification.

(a) * * *

(4) For any gaseous-fueled engine, including dual-fuel and flexible-fuel engines, you may determine the methane (CH_4) and ethane (C_2H_6) response factors as a function of the molar water concentration in the raw or diluted exhaust. Generate and verify the humidity level (or fraction) as described in § 1065.365(d)(12).

* * * * *

(d) * * *

(12) To determine the response factor as a function of exhaust molar water concentration, humidify the CH_4 span gas and repeat the steps in paragraphs (d)(7) through (9) of this section until measurements are complete for each setpoint in the selected range. For each measurement, divide the mean measured concentration by the recorded span concentration of the CH_4 calibration gas, adjusted for water content. The result is the FID analyzer's response factor for CH_4, $RF_{CH4[THC–FID]}$. Use these CH_4 response factors to determine the response factor based on the exhaust molar water concentration, downstream of the last sample dryer if any sample dryers are present, during the emission test and use this response factor to account for the CH_4 response for NMHC determination described in § 1065.660(b)(2)(iii).

* * * * *

■ 329. Amend § 1065.365 by:

■ a. Revising paragraph (a), paragraph (d) introductory text, and paragraph (d)(9);

■ b. Adding paragraphs (d)(10) through (12); and

■ c. Revising paragraphs (f)(9) and (14).

The revisions and additions read as follows:

§ 1065.365 Nonmethane cutter penetration fractions.

(a) *Scope and frequency.* If you use a FID analyzer and a nonmethane cutter (NMC) to measure methane (CH_4), determine the nonmethane cutter's penetration fractions of CH_4, PF_{CH4}, and ethane (C_2H_6), PF_{C2H6}. As detailed in this section, these penetration fractions may be determined as a combination of NMC penetration fractions and FID analyzer response factors, depending on your particular NMC and FID analyzer configuration. Perform this verification after installing the nonmethane cutter. Repeat this verification within 185 days of testing to verify that the catalytic activity of the cutter has not deteriorated. Note that because nonmethane cutters can deteriorate rapidly and without warning if they are operated outside of certain ranges of gas concentrations and outside of certain temperature ranges, good engineering judgment may dictate that you determine a nonmethane cutter's penetration fractions more frequently.

* * * * *

(d) *Procedure for a FID calibrated with the NMC.* The method described in this paragraph (d) is recommended over the procedures specified in paragraphs (e) and (f) of this section. If your FID arrangement is such that a FID is always calibrated to measure CH_4 with the NMC, then span that FID with the NMC using a CH_4 span gas, set the product of that FID's CH_4 response factor and CH_4 penetration fraction, $RFPF_{CH4[NMC–FID]}$, equal to 1.0 for all emission calculations, and determine its combined C_2H_6 response factor and penetration fraction, $RFPF_{C2H6[NMC–FID]}$ as follows. For any gaseous-fueled engine, including dual-fuel and flexible-fuel engines, you must determine the CH_4 penetration fraction, $PF_{CH4[NMC–FID]}$ and C_2H_6 response factor and C_2H_6 penetration fraction, $RFPF_{C2H6[NMC–FID]}$ as a function of the molar water concentration in the raw or diluted exhaust. Generate and verify the humidity generation as described in § 1065.365(d)(12). When using this option, note that the FID's CH_4 penetration fraction, $PF_{CH4[NMC–FID]}$, is set equal to 1.0 only for 0% molar water concentration. You are not required to meet the recommended lower limit for PF_{CH4} of greater than 0.85 for any of the penetration fractions generated as a function of molar water concentration.

* * * * *

(9) Divide the mean C_2H_6 concentration by the reference concentration of C_2H_6, converted to a C_1 basis. The result is the C_2H_6 combined response factor and penetration fraction, $RFPF_{C2H6[NMC–FID]}$. Use this combined C_2H_6 response factor and C_2H_6 penetration fraction and the product of the CH_4 response factor and CH_4 penetration fraction, $RFPF_{CH4[NMC–FID]}$, set to 1.0 in emission calculations according to § 1065.660(b)(2)(i), § 1065.660(d)(1)(i), or § 1065.665, as applicable.

(10) To determine the combined C_2H_6 response factor and C_2H_6 penetration fraction as a function of exhaust molar water concentration, humidify the C_2H_6 analytical gas mixture as described in paragraph (d)(12) of this section. Repeat the steps in paragraphs (d)(6) through (8) of this section until measurements are complete for each setpoint in the selected range. For each measurement, divide the mean C_2H_6 concentration by the reference concentration of C_2H_6, converted to a C_1-basis and adjusted for water content. The result is the combined C_2H_6 response factor and C_2H_6 penetration fraction, $RFPF_{C2H6[NMC–FID]}$. Use these combined C_2H_6 response factors and C_2H_6 penetration fractions to determine the combined response factor and penetration fraction based on the exhaust molar water concentration, downstream of the last sample dryer if any sample dryers are present, during the emission test and use this combined response factor and penetration fraction to account for C_2H_6 response factor and penetration fraction for NMHC and CH_4 determination as described in § 1065.660(b)(2)(iii) and (d)(1)(iii).

(11) To determine the CH_4 penetration fraction as a function of exhaust molar water concentration, repeat the steps in paragraphs (d)(6) through (10) of this section, but with the CH_4 analytical gas mixture instead of C_2H_6. The result will be the CH_4 penetration fraction, $PF_{CH4[NMC–FID]}$ based on the exhaust molar water concentration during the emission test. Use this penetration fraction for NMHC and CH_4 determination as described in § 1065.660(b)(2)(iii) and (d)(1)(iii).

(12) For wet methane analyzers generate at least five different water concentrations that cover the range from minimum expected water concentration to greater than the maximum expected water during testing. Use good engineering judgement to determine the target concentrations. Dry gas can be one of these points. For dry methane analyzers, determine the methane penetration fraction by humidifying the sample to a level higher than the sample dryer outlet humidity and measure a single wet penetration fraction of the dehumidified sample. Heat all transfer lines from the water generation system to a temperature 5 °C higher than the highest dewpoint generated. Use at least 30 second averages of measured water concentration in paragraphs (d)(12)(i) and (ii)(B) of this section to determine the water content of the sample stream at the same time you determine the response factor and penetration fraction. Validate the water generation system using one of the following methods:

(i) Monitor humidified sample stream with a dewpoint analyzer, relative humidity sensor, FTIR, NDIR, or other water analyzer during the test.

(ii) If the humidity generator utilizes controlled flow rates of gas and/or liquids to generate the humidity levels, validate the instrument within 370 days before testing and after major maintenance by using one of the following options:

(A) Determine the linearity of each flow metering device. Using good engineering judgment and the gas divider manufacturer's recommendations, use one or more reference flow meters to measure the flow rates of the gas divider and verify the gas-division value. This method should utilize at least 10 flow rates for each flow metering device.

(B) Monitor the humidified stream with a dewpoint analyzer, relative humidity sensor, FTIR, NDIR, or other water analyzer. Generate at least five different water concentrations that cover the range from minimum expected water concentration to greater than the maximum expected water during testing. Compare the measured humidity versus the calculated generated humidity. Verify overall linearity performance for the generated humidity by following § 1065.307 or confirm all measured values are within ± 2% of the generated mole fraction. If dry gas is used it must be measured within 0.002 mole fraction.

(C) If the humidity generator did not meet the requirements of paragraphs (d)(12)(ii)(A) or (B) of this section, follow the performance requirements in § 1065.307(b).

* * * * *

(f) * * *

(9) Divide the mean C_2H_6 concentration by the reference concentration of C_2H_6, converted to a C_1 basis. The result is the combined C_2H_6 response factor and C_2H_6 penetration fraction, $RFPF_{C2H6[NMC–FID]}$. Use this combined C_2H_6 response factor and C_2H_6 penetration fraction according to § 1065.660(b)(2)(iii), § 1065.660(d)(1)(iii), or § 1065.665, as applicable.

* * * * *

(14) Divide the mean CH_4 concentration measured through the nonmethane cutter by the mean CH_4 concentration measured after bypassing the nonmethane cutter. The result is the CH_4 penetration fraction, $PF_{CH4[NMC–FID]}$. Use this CH_4 penetration fraction according to § 1065.660(b)(2)(iii), § 1065.660(d)(1)(iii), or § 1065.665, as applicable.

■ 330. Amend § 1065.370 by revising paragraph (e)(5) to read as follows:

§ 1065.370 CLD CO_2 and H_2O quench verification.

* * * * *

(e) * * *

(5) Humidify the NO span gas using a humidity generator. If the humidified NO span gas sample does not pass through a sample dryer for this verification test, control the humidity generator so that it generates an H_2O level approximately equal to the maximum mole fraction of H_2O expected during emission testing. If the humidified NO span gas sample does not pass through a sample dryer, the quench verification calculations in § 1065.675 scale the measured H_2O quench to the highest mole fraction of H_2O expected during emission testing. If the humidified NO span gas sample passes through a dryer for this verification test, control the humidity generator so that it generates an H_2O level at least as high as the level determined in § 1065.145(e)(2). For this case, the quench verification calculations in § 1065.675 do not scale the measured H_2O quench.

* * * * *

■ 331. Amend § 1065.375 by revising paragraph (d)(2) to read as follows:

§ 1065.375 Interference verification for N_2O analyzers.

* * * * *

(d) * * *

(2) Create a humidified test gas by bubbling a multi component span gas that incorporates the target interference species and meets the specifications in § 1065.750 through distilled H_2O in a sealed vessel or use a device that injects distilled water as vapor into a controlled gas flow. If the sample is not passed through a dryer during emission testing, control the vessel temperature to generate an H_2O level at least as high as the maximum expected during emission testing. If the sample is passed through a dryer during emission testing, control the vessel temperature to generate an H_2O level at least as high as the level determined in § 1065.145(e)(2) for that dryer. Use interference span gas concentrations that are at least as high as the maximum expected during testing.

* * * * *

■ 332. Amend § 1065.410 by revising paragraph (d) to read as follows:

§ 1065.410 Maintenance limits for stabilized test engines.

* * * * *

(d) You may repair a test engine as needed for defective parts that are unrelated to emission control. You must ask us to approve repairs that might affect the engine's emission controls. If

we determine that a part failure, system malfunction, or associated repairs have made the engine's emission controls unrepresentative of production engines, you may no longer use it as an emission-data engine. Also, if your test engine has a major mechanical failure that requires you to take it apart, you may no longer use it as an emission-data engine.

■ 333. Amend § 1065.510 by revising paragraph (a) introductory text, and paragraphs (b)(5)(i) and (f)(4)(i) to read as follows:

§ 1065.510 Engine mapping.

(a) *Applicability, scope, and frequency.* An engine map is a data set that consists of a series of paired data points that represent the maximum brake torque versus engine speed, measured at the engine's primary output shaft. Map your engine if the standard-setting part requires engine mapping to generate a duty cycle for your engine configuration. Map your engine while it is connected to a dynamometer or other device that can absorb work output from the engine's primary output shaft according to § 1065.110. Configure any auxiliary work inputs and outputs such as hybrid, turbo-compounding, or thermoelectric systems to represent their in-use configurations, and use the same configuration for emission testing. See Figure 1 of § 1065.210. This may involve configuring initial states of charge and rates and times of auxiliary-work inputs and outputs. We recommend that you contact the Designated Compliance Officer before testing to determine how you should configure any auxiliary-work inputs and outputs. Use the most recent engine map to transform a normalized duty cycle from the standard-setting part to a reference duty cycle specific to your engine. Normalized duty cycles are specified in the standard-setting part. You may update an engine map at any time by repeating the engine-mapping procedure. You must map or re-map an engine before a test if any of the following apply:

* * * * *

(b) * * *

(5) Perform one of the following:

(i) For any engine subject only to steady-state duty cycles, you may perform an engine map by using discrete speeds. Select at least 20 evenly spaced setpoints from 95% of warm idle speed to the highest speed above maximum power at which 50% of maximum power occurs. We refer to this 50% speed as the check point speed as described in paragraph (b)(5)(iii) of this section. At each setpoint, stabilize speed and allow torque to stabilize. We recommend that you stabilize an engine for at least 15 seconds at each setpoint and record the mean feedback speed and torque of the last (4 to 6) seconds. Record the mean speed and torque at each setpoint. Use linear interpolation to determine intermediate speeds and torques. Use this series of speeds and torques to generate the power map as described in paragraph (e) of this section.

* * * * *

(f) * * *

(4) *Required declared torques.* If a nonzero idle or minimum torque is representative of in-use operation, you must declare the appropriate torque as follows:

(i) For variable-speed engines, declare a warm idle torque that is representative of in-use operation. For example, if your engine is typically connected to an automatic transmission or a hydrostatic transmission, declare the torque that occurs at the idle speed at which your engine operates when the transmission is engaged. Use this value for cycle generation. You may use multiple warm idle torques and associated idle speeds in cycle generation for representative testing. For example, for cycles that start the engine and begin with idle, you may start a cycle in idle with the transmission in neutral with zero torque and later switch to a different idle with the transmission in drive with the Curb-Idle Transmission Torque (CITT). For variable-speed engines intended primarily for propulsion of a vehicle with an automatic transmission where that engine is subject to a transient duty cycle with idle operation, you must declare a CITT. You must specify a CITT based on typical applications at the mean of the range of idle speeds you specify at stabilized temperature conditions. You may also specify CITT as a function of idle speed in cases where you have an adjustable warm idle or enhanced idle.

* * * * *

■ 334. Amend § 1065.512 by revising paragraphs (b)(1) and (2) to read as follows:

§ 1065.512 Duty cycle generation.

* * * * *

(b) * * *

(1) *Engine speed for variable-speed engines.* For variable-speed engines, normalized speed may be expressed as a percentage between warm idle speed, $f_{nidle,}$ and maximum test speed, $f_{ntest,}$ or speed may be expressed by referring to a defined speed by name, such as ''warm idle,'' ''intermediate speed,'' or ''A,'' ''B,'' or ''C'' speed. Section 1065.610 describes how to transform these normalized values into a sequence of reference speeds, f_{nref}. Running duty cycles with negative or small normalized speed values near warm idle speed may cause low-speed idle governors to activate and the engine torque to exceed the reference torque even though the operator demand is at a minimum. In such cases, we recommend controlling the dynamometer so it gives priority to follow the reference torque instead of the reference speed and let the engine govern the speed. Note that the cycle-validation criteria in § 1065.514 allow an engine to govern itself. This allowance permits you to test engines with enhanced-idle devices and to simulate the effects of transmissions such as automatic transmissions. For example, an enhanced-idle device might be an idle speed value that is normally commanded only under cold-start conditions to quickly warm up the engine and aftertreatment devices. In this case, negative and very low normalized speeds will generate reference speeds below this higher enhanced idle speed. When using enhanced-idle devices you may do one of the following:

(i) Control the dynamometer so it gives priority to follow the reference torque, controlling the operator demand so it gives priority to follow reference speed and let the engine govern the speed when the operator demand is at minimum.

(ii) While running an engine that broadcasts enhanced-idle speed, use that broadcast speed as the reference speed whenever the denormalized speed is below that broadcast value. Note the special torque denormalization in paragraph (b)(2) of this section. When performing duty-cycle validation, use these new reference points.

(2) *Engine torque for variable-speed engines.* For variable-speed engines, normalized torque is expressed as a percentage of the mapped torque at the corresponding reference speed. Section 1065.610 describes how to transform normalized torques into a sequence of reference torques, T_{ref}. Section 1065.610 also describes special requirements for modifying transient duty cycles for variable-speed engines intended primarily for propulsion of a vehicle with an automatic transmission. Section 1065.610 also describes under what conditions you may command T_{ref} greater than the reference torque you calculated from a normalized duty cycle. This provision permits you to command T_{ref} values that are limited by a declared minimum torque. For any negative torque commands, command minimum operator demand and use the dynamometer to control engine speed to

the reference speed, but if reference speed is so low that the idle governor activates, we recommend using the dynamometer to control torque to zero, CITT, or a declared minimum torque as appropriate. Note that you may omit power and torque points during motoring from the cycle-validation criteria in § 1065.514. Also, use the maximum mapped torque at the minimum mapped speed as the maximum torque for any reference speed at or below the minimum mapped speed. If you use the provision in paragraph (b)(1)(ii) of this section do not alter the denormalized reference torque.

* * * * *

■ 335. Amend § 1065.514 by revising paragraph (e) introductory text to read as follows:

§ 1065.514 Cycle-validation criteria for operation over specified duty cycles.

* * * * *

(e) *Statistical parameters.* Use the remaining points to calculate regression statistics for a floating intercept described in § 1065.602. Round calculated regression statistics to the same number of significant digits as the criteria to which they are compared. Refer to Table 2 of § 1065.514 for the default criteria and refer to the standard-setting part to determine if there are other criteria for your engine. Calculate the following regression statistics:

* * * * *

■ 336. Amend § 1065.530 by revising paragraph (a)(2)(iii) and adding paragraph (g)(5) to read as follows:

§ 1065.530 Emission test sequence.

(a) * * *

(2) * * *

(iii) For testing that involves hot-stabilized emission measurements, bring the engine either to warm idle or the first operating point of the duty cycle. Start the test within 10 min of achieving temperature stability. Determine temperature stability based on measured operating temperature staying within ±2% of the mean value for at least 2 min based on the following parameters:

(A) Engine coolant or block or head absolute temperatures for water-cooled engines. You may also determine temperature stability as the point at which the engine thermostat controls engine temperature.

(B) Oil sump absolute temperature for air-cooled engines with an oil sump.

(C) Cylinder head absolute temperature or exhaust gas temperature for air-cooled engines with no oil sump.

* * * * *

(g) * * *

(5) If carbon balance error verification is required or if you choose to perform the verification, verify carbon balance error as required by the standard-setting part and as described in § 1065.543. For all test intervals, calculate and report the three test-interval carbon balance error quantities; carbon mass absolute error for a test interval (ε_{aC}), carbon mass rate absolute error for a test interval (ε_{aCrate}), and carbon mass relative error for a test interval (ε_{rC}). For multi-test-interval duty cycles, you may instead calculate and report the composite carbon mass relative error for multiple-test-interval duty cycles (ε_{rCcomp}) instead of the test-interval carbon balance error quantities. If you choose to use the multi-test-interval option, you must still calculate and report the results for the three test-interval options.

* * * * *

■ 337. Add § 1065.543 to read as follows:

§ 1065.543 Carbon balance error verification.

(a) A carbon balance error verification compares independent assessments of the flow of carbon through the system (engine plus aftertreatment). The carbon flow out of the system, as determined by the exhaust emissions calculations, is compared to the carbon flow of all the streams flowing into the system (fuels, fluids (*e.g.,* DEF), and intake-air). Note that this verification is not valid when exhaust molar flow rate is calculated using fuel rate and chemical balance as described in § 1065.655(f)(3) because the flows of carbon into and out of the system are not independent. The following is a partial list of possible causes for failing a carbon balance error verification and recommended corrective actions:

(1) Problems with the gas analyzer system:

(i) *Incorrect analyzer calibration.* Perform a calibration of the NDIR and/or THC analyzers.

(ii) *Incorrect time alignment between flow and concentration data.* Determine transformation time, $t_{50,}$ for continuous gas analyzers and time-align flow and concentration data as described in § 1065.650(c)(2)(i).

(iii) *Problems with the sample system.* Inspect the sample system components such as sample lines, filters, chillers, and pumps for leaks, operating temperature, and contamination.

(2) Problems with fuel flow measurement:

(i) *Zero shift of fuel flow rate meter.* Perform an in-situ zero adjustment.

(ii) *Change in fuel flow meter calibration.* Perform a calibration of the fuel flow meter as described in § 1065.320.

(iii) *Incorrect time alignment of fuel flow data.* Time align fuel flow data to ensure that fuel flow data from transitions between test intervals is not included when integrating the fuel mass over a test interval.

(iv) *Short sampling periods.* For test intervals that are allowed to vary in duration, such as discrete-mode steady-state duty cycles, extend the test interval duration to improve accuracy when measuring low fuel flow rates.

(v) *Fluctuations in the fuel conditioning system.* Improve the stability of the fuel temperature and pressure conditioning system to improve accuracy when measuring low fuel flows.

(3) Dilute testing using a CVS system:

(i) *Leaks.* Inspect exhaust system and CVS tunnel, connections, and fasteners and repair or replace components. A leak in the exhaust transfer tube to the CVS will drive your carbon balance error negative.

(ii) *Poor mixing.* Perform the verification described in § 1065.341(a)(3) to look for and correct poor mixing.

(iii) *Change in CVS calibration.* Perform a calibration of the CVS flow meter as described in § 1065.340.

(iv) *Flow meter entrance effects.* Inspect the CVS tunnel to determine whether the entrance effects from the piping configuration upstream of the flow meter adversely affect the flow measurement.

(v) *Other problems with the CVS or sampling verification hardware or software.* Inspect the CVS system, CVS verification hardware, and software for discrepancies.

(4) Raw testing using intake air flow measurement or direct exhaust flow measurement:

(i) *Leaks.* Inspect the intake air system and exhaust system, connections, fasteners, and repair or replace components.

(ii) *Zero shift of intake air flow rate meter.* Perform an in-situ zero adjustment.

(iii) *Change in intake air flow meter calibration.* Perform a calibration of the intake air flow meter as described in § 1065.325.

(iv) *Zero shift of exhaust flow rate meter.* Perform an in-situ zero adjustment.

(v) *Change in exhaust flow meter calibration.* Perform a calibration of the exhaust flow meter as described in § 1065.330.

(vi) *Flow meter entrance effects.* Inspect the intake air system and the exhaust system to determine whether the entrance effects from the piping configuration upstream and downstream

of the intake air flow meter or the exhaust flow meter adversely affect the flow measurement.

(v) *Other problems with the intake air flow and exhaust flow measurement hardware or software.* Inspect the intake air flow and exhaust flow measurement hardware or software for discrepancies.

(b) Perform the carbon balance error verification as follows:

(1) Carbon balance error verification takes place during the post emission sampling portion of the emission test sequence as described in § 1065.530(g). Your test must include measurements of the following to verify carbon balance error: Fuel flow, flow of all other carbon-carrying fluids into the system, flows required to determine intake air flow, and the amount of carbon containing gaseous emissions.

(2) The calculations for determining carbon balance error are described in § 1065.643. There are four different carbon balance error quantities: Carbon mass absolute error for a test interval (ε_{aC}), carbon mass rate absolute error for a test interval (ε_{aCrate}), carbon mass relative error for a test interval (ε_{rC}), and composite carbon mass relative error for multiple-test-interval duty cycles (ε_{rCcomp}). If you choose to verify carbon balance error, verify as follows:

(i) For all test intervals, determine ε_{aC}, ε_{aCrate}, and ε_{rC}.

(ii) For all duty cycles, verify using one of the following two methods:

(A) For all test intervals, verify that at least one of the three carbon balance error quantities for test intervals (ε_{aC}, ε_{aCrate}, or ε_{rC}) meets its applicable limit specified in paragraph (b)(3) of this section.

(B) For multiple-test-interval duty cycles, you may instead verify that ε_{rCcomp} is within (0.000 ± 0.020).

(3) The following are the limits for the three carbon balance error quantities for test intervals:

(i) ε_{aC} must be within (0.000 ± $L\varepsilon_{aC}$) g, where the carbon mass absolute error limit, $L\varepsilon_{aC}$, is determined using Eq. 1065.543–1, in units of grams and expressed to at least four decimal places.

$$L_{\epsilon aC} = c \cdot P_{max}$$

Eq. 1065.543-1

Where:

c = power-specific carbon mass absolute error coefficient = 0.007 g/kW.

P_{max} = maximum power from the engine map generated according to § 1065.510. If a measured.

P_{max} is not available, use a manufacturer-declared value for P_{max}.

Example:

c = 0.007 g/kW

P_{max} = 230.0 kW

$L\varepsilon_{aC}$ = 0.0007 · 23.00 = 1.6100 g

(ii) ε_{aCrate} must be within (0.000 ± $L\varepsilon_{aCrate}$) g/hr, where the carbon mass rate absolute error limit, $L\varepsilon_{aCrate}$, is determined using Eq. 1065.543–2, in units of grams per hour and expressed to at least three decimal places.

$$L_{\epsilon aCrate} = d \cdot P_{max}$$

Eq. 1065.543-2

Where:

d = power-specific carbon mass rate absolute error coefficient = 0.31 g/(kW·hr).

P_{max} = maximum power from the engine map generated according to § 1065.510. If a measured.

P_{max} is not available, use a manufacturer-declared value for P_{max}.

Example:

d = 0.31 g/(kW·hr)

P_{max} = 230.0 kW

$L\varepsilon_{aCrate}$ = 0.31·2300 = 71.3 g/hr

(iii) ε_{rC} must be within (0.000 ± 0.020).

■ 338. Amend § 1065.545 by revising paragraph (a) to read as follows:

§ 1065.545 Verification of proportional flow control for batch sampling.

* * * * *

(a) For any pair of flow rates, use recorded sample and total flow rates, where total flow rate means the raw exhaust flow rate for raw exhaust sampling and the dilute exhaust flow rate for CVS sampling, or their 1 Hz means with the statistical calculations in § 1065.602 forcing the intercept through zero. Determine the standard error of the estimate, *SEE,* of the sample flow rate versus the total flow rate. For each test interval, demonstrate that *SEE* was less than or equal to 3.5% of the mean sample flow rate.

* * * * *

■ 339. Revise § 1065.602 to read as follows:

§ 1065.602 Statistics.

(a) *Overview.* This section contains equations and example calculations for statistics that are specified in this part. In this section we use the letter ''y'' to denote a generic measured quantity, the superscript over-bar ''– '' to denote an arithmetic mean, and the subscript ''$_{ref}$'' to denote the reference quantity being measured.

(b) *Arithmetic mean.* Calculate an arithmetic mean, $\bar{y}$, as follows:

$$\overline{y} = \frac{\sum_{i=1}^{N} y_i}{N}$$

Eq. 1065.602-1

Example:

N = 3

y_1 = 10.60

y_2 = 11.91

$y_N = y_3$ = 11.09

$$\overline{y} = \frac{10.60 + 11.91 + 11.09}{3}$$

$\bar{y}$ = 11.20

(c) *Standard deviation.* Calculate the standard deviation for a non-biased (*e.g.,* N–1) sample, as follows:

$$\sigma_y = \sqrt{\frac{\sum_{i=1}^{N}(y_i - \bar{y})^2}{(N-1)}}$$

Eq. 1065.602-2

Example:
$N = 3$
$y_1 = 10.60$
$y_2 = 11.91$
$y_N = y_3 = 11.09$
$\bar{y} = 11.20$

$$\sigma_y = \sqrt{\frac{(10.60 - 11.2)^2 + (11.91 - 11.2)^2 + (11.09 - 11.2)^2}{2}}$$

$\sigma_y = 0.6619$

(d) *Root mean square.* Calculate a root mean square, rms_y, as follows:

$$rms_y = \sqrt{\frac{1}{N}\sum_{i=1}^{N} y_i^2}$$

Eq. 1065.602-3

Example:
$N = 3$
$y_1 = 10.60$
$y_2 = 11.91$
$y_N = y_3 = 11.09$

$$rms_y = \sqrt{\frac{10.60^2 + 11.91^2 + 11.09^2}{3}}$$

$rms_y = 11.21$

(e) *Accuracy.* Determine accuracy as described in this paragraph (e). Make multiple measurements of a standard quantity to create a set of observed values, y_i, and compare each observed value to the known value of the standard quantity. The standard quantity may have a single known value, such as a gas standard, or a set of known values of negligible range, such as a known applied pressure produced by a calibration device during repeated applications. The known value of the standard quantity is represented by y_{refi}. If you use a standard quantity with a single value, y_{refi} would be constant. Calculate an accuracy value as follows:

$$accuracy = \left| \frac{1}{N}\sum_{i=1}^{N}(y_i - y_{refi}) \right|$$

Eq. 1065.602-4

Example:
$y_{ref} = 1800.0$
$N = 3$
$y_1 = 1806.4$
$y_2 = 1803.1$
$y_3 = 1798.9$

$$accuracy = \left| \frac{1}{3}\left((1806.4 - 1800.0) + (1803.1 - 1800.0) + (1798.9 - 1800.0)\right) \right|$$

$$accuracy = \left| \frac{1}{3}\left((6.4) + (3.1) + (-1.1)\right) \right|$$

$$accuracy = 2.8$$

(f) *t-test.* Determine if your data passes a *t*-test by using the following equations and tables:

(1) For an unpaired *t*-test, calculate the *t* statistic and its number of degrees of freedom, *v,* as follows:

$$t = \frac{\left|\overline{y}_{\text{ref}} - \overline{y}\right|}{\sqrt{\frac{\sigma_{\text{ref}}^2}{N_{\text{ref}}} + \frac{\sigma_{\text{y}}^2}{N}}}$$

Eq. 1065.602-5

$$v = \frac{\left(\frac{\sigma_{\text{ref}}^2}{N_{\text{ref}}} + \frac{\sigma_{\text{y}}^2}{N}\right)^2}{\frac{\left(\frac{\sigma_{\text{ref}}^2}{N_{\text{ref}}}\right)^2}{N_{\text{ref}} - 1} + \frac{\left(\frac{\sigma_{\text{y}}^2}{N}\right)^2}{N - 1}}$$

Eq. 1065.602-6

Example:

$\bar{y}_{\text{ref}} = 1205.3$
$\bar{y} = 1123.8$
$\sigma_{\text{ref}} = 9.399$
$\sigma_{\text{y}} = 10.583$
$N_{\text{ref}} = 11$
$N = 7$

$$t = \frac{\left|1205.3 - 1123.8\right|}{\sqrt{\frac{9.399^2}{11} + \frac{10.583^2}{7}}}$$

$t = 16.63$
$\sigma_{\text{ref}} = 9.399$
$\sigma_{\text{y}} = 10.583$
$N_{\text{ref}} = 11$
$N = 7$

$$v = \frac{\left(\frac{9.399^2}{11} + \frac{10.583^2}{7}\right)^2}{\frac{\left(\frac{9.399^2}{11}\right)^2}{11 - 1} + \frac{\left(\frac{10.583^2}{7}\right)^2}{7 - 1}}$$

$V = 11.76$

(2) For a paired *t*-test, calculate the *t* statistic and its number of degrees of freedom, *v,* as follows, noting that the $\varepsilon_i$are the errors (*e.g.,* differences) between each pair of $y_{\text{ref}i}$ and y_i:

$$t = \frac{\left|\overline{\varepsilon}\right| \cdot \sqrt{N}}{\sigma_{\varepsilon}}$$

Eq. 1065.602-7

Example:

$\bar{E} = -0.12580$
$N = 16$
$\sigma_{\text{e}} = 0.04837$

$$t = \frac{\left|-0.12580\right| \cdot \sqrt{16}}{0.04837}$$

$t = 10.403$
$v = N - 1$

Example:

$N = 16$
$v = 16 - 1$
$v = 15$

(3) Use Table 1 of this section to compare *t* to the t_{crit} values tabulated versus the number of degrees of freedom. If *t* is less than t_{crit}, then *t* passes the *t*-test. The Microsoft Excel software has a TINV function that returns results equivalent results and may be used in place of Table 1, which follows:

TABLE 1 OF § 1065.602—CRITICAL *t* VALUES VERSUS NUMBER OF DEGREES OF FREEDOM, *v* [a]

v	Confidence	
	90%	95%
1	6.314	12.706
2	2.920	4.303
3	2.353	3.182
4	2.132	2.776
5	2.015	2.571
6	1.943	2.447
7	1.895	2.365
8	1.860	2.306
9	1.833	2.262

TABLE 1 OF § 1065.602—CRITICAL *t* VALUES VERSUS NUMBER OF DEGREES OF FREEDOM, *v*[a]—Continued

v	Confidence	
	90%	95%
10	1.812	2.228
11	1.796	2.201
12	1.782	2.179
13	1.771	2.160
14	1.761	2.145
15	1.753	2.131
16	1.746	2.120
18	1.734	2.101
20	1.725	2.086

TABLE 1 OF § 1065.602—CRITICAL *t* VALUES VERSUS NUMBER OF DEGREES OF FREEDOM, *v*[a]—Continued

v	Confidence	
	90%	95%
22	1.717	2.074
24	1.711	2.064
26	1.706	2.056
28	1.701	2.048
30	1.697	2.042
35	1.690	2.030
40	1.684	2.021
50	1.676	2.009
70	1.667	1.994

TABLE 1 OF § 1065.602—CRITICAL *t* VALUES VERSUS NUMBER OF DEGREES OF FREEDOM, *v*[a]—Continued

v	Confidence	
	90%	95%
100	1.660	1.984
1000+	1.645	1.960

[a] Use linear interpolation to establish values not shown here.

(g) *F-test.* Calculate the *F* statistic as follows:

$$F_{\mathrm{y}} = \frac{\sigma_{\mathrm{y}}^{2}}{\sigma_{\mathrm{ref}}^{2}}$$

Eq. 1065.602-8

Example:

$$\sigma_{\mathrm{y}} = \sqrt{\frac{\sum_{i=1}^{N}\left(y_i - \overline{y}\right)^2}{\left(N-1\right)}} = 10.583$$

$$\sigma_{\mathrm{ref}} = \sqrt{\frac{\sum_{i=1}^{N_{\mathrm{ref}}}\left(y_{\mathrm{ref}i} - \overline{y}_{\mathrm{ref}}\right)^2}{\left(N_{\mathrm{ref}}-1\right)}} = 9.399$$

$$F = \frac{10.583^2}{9.399^2}$$

$$F = 1.268$$

(1) For a 90% confidence *F*-test, use the following table to compare *F* to the F_{crit90} values tabulated versus (N–1) and (N_{ref}–1). If *F* is less than F_{crit90}, then *F* passes the *F*-test at 90% confidence.

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TABLE 2 OF § 1065.602—CRITICAL F VALUES, F_{crit90}, VERSUS N–1 AND N_{ref}–1 AT 90 % CONFIDENCE

N–1	1	2	3	4	5	6	7	8	9	10	12	15	20	24	30	40	60	120	1000+
N_{ref}–1																			
1	39.86	49.50	53.59	55.83	57.24	58.20	58.90	59.43	59.85	60.19	60.70	61.22	61.74	62.00	62.26	62.52	62.79	63.06	63.32
2	8.526	9.000	9.162	9.243	9.293	9.326	9.349	9.367	9.381	9.392	9.408	9.425	9.441	9.450	9.458	9.466	9.475	9.483	9.491
3	5.538	5.462	5.391	5.343	5.309	5.285	5.266	5.252	5.240	5.230	5.216	5.200	5.184	5.176	5.168	5.160	5.151	5.143	5.134
4	4.545	4.325	4.191	4.107	4.051	4.010	3.979	3.955	3.936	3.920	3.896	3.870	3.844	3.831	3.817	3.804	3.790	3.775	3.761
5	4.060	3.780	3.619	3.520	3.453	3.405	3.368	3.339	3.316	3.297	3.268	3.238	3.207	3.191	3.174	3.157	3.140	3.123	3.105
6	3.776	3.463	3.289	3.181	3.108	3.055	3.014	2.983	2.958	2.937	2.905	2.871	2.836	2.818	2.800	2.781	2.762	2.742	2.722
7	3.589	3.257	3.074	2.961	2.883	2.827	2.785	2.752	2.725	2.703	2.668	2.632	2.595	2.575	2.555	2.535	2.514	2.493	2.471
8	3.458	3.113	2.924	2.806	2.726	2.668	2.624	2.589	2.561	2.538	2.502	2.464	2.425	2.404	2.383	2.361	2.339	2.316	2.293
9	3.360	3.006	2.813	2.693	2.611	2.551	2.505	2.469	2.440	2.416	2.379	2.340	2.298	2.277	2.255	2.232	2.208	2.184	2.159
10	3.285	2.924	2.728	2.605	2.522	2.461	2.414	2.377	2.347	2.323	2.284	2.244	2.201	2.178	2.155	2.132	2.107	2.082	2.055
11	3.225	2.860	2.660	2.536	2.451	2.389	2.342	2.304	2.274	2.248	2.209	2.167	2.123	2.100	2.076	2.052	2.026	2.000	1.972
12	3.177	2.807	2.606	2.480	2.394	2.331	2.283	2.245	2.214	2.188	2.147	2.105	2.060	2.036	2.011	1.986	1.960	1.932	1.904
13	3.136	2.763	2.560	2.434	2.347	2.283	2.234	2.195	2.164	2.138	2.097	2.053	2.007	1.983	1.958	1.931	1.904	1.876	1.846
14	3.102	2.726	2.522	2.395	2.307	2.243	2.193	2.154	2.122	2.095	2.054	2.010	1.962	1.938	1.912	1.885	1.857	1.828	1.797
15	3.073	2.695	2.490	2.361	2.273	2.208	2.158	2.119	2.086	2.059	2.017	1.972	1.924	1.899	1.873	1.845	1.817	1.787	1.755
16	3.048	2.668	2.462	2.333	2.244	2.178	2.128	2.088	2.055	2.028	1.985	1.940	1.891	1.866	1.839	1.811	1.782	1.751	1.718
17	3.026	2.645	2.437	2.308	2.218	2.152	2.102	2.061	2.028	2.001	1.958	1.912	1.862	1.836	1.809	1.781	1.751	1.719	1.686
18	3.007	2.624	2.416	2.286	2.196	2.130	2.079	2.038	2.005	1.977	1.933	1.887	1.837	1.810	1.783	1.754	1.723	1.691	1.657
19	2.990	2.606	2.397	2.266	2.176	2.109	2.058	2.017	1.984	1.956	1.912	1.865	1.814	1.787	1.759	1.730	1.699	1.666	1.631
20	2.975	2.589	2.380	2.249	2.158	2.091	2.040	1.999	1.965	1.937	1.892	1.845	1.794	1.767	1.738	1.708	1.677	1.643	1.607
21	2.961	2.575	2.365	2.233	2.142	2.075	2.023	1.982	1.948	1.920	1.875	1.827	1.776	1.748	1.719	1.689	1.657	1.623	1.586
22	2.949	2.561	2.351	2.219	2.128	2.061	2.008	1.967	1.933	1.904	1.859	1.811	1.759	1.731	1.702	1.671	1.639	1.604	1.567
23	2.937	2.549	2.339	2.207	2.115	2.047	1.995	1.953	1.919	1.890	1.845	1.796	1.744	1.716	1.686	1.655	1.622	1.587	1.549
24	2.927	2.538	2.327	2.195	2.103	2.035	1.983	1.941	1.906	1.877	1.832	1.783	1.730	1.702	1.672	1.641	1.607	1.571	1.533
25	2.918	2.528	2.317	2.184	2.092	2.024	1.971	1.929	1.895	1.866	1.820	1.771	1.718	1.689	1.659	1.627	1.593	1.557	1.518
26	2.909	2.519	2.307	2.174	2.082	2.014	1.961	1.919	1.884	1.855	1.809	1.760	1.706	1.677	1.647	1.615	1.581	1.544	1.504
27	2.901	2.511	2.299	2.165	2.073	2.005	1.952	1.909	1.874	1.845	1.799	1.749	1.695	1.666	1.636	1.603	1.569	1.531	1.491
28	2.894	2.503	2.291	2.157	2.064	1.996	1.943	1.900	1.865	1.836	1.790	1.740	1.685	1.656	1.625	1.593	1.558	1.520	1.478
29	2.887	2.495	2.283	2.149	2.057	1.988	1.935	1.892	1.857	1.827	1.781	1.731	1.676	1.647	1.616	1.583	1.547	1.509	1.467
30	2.881	2.489	2.276	2.142	2.049	1.980	1.927	1.884	1.849	1.819	1.773	1.722	1.667	1.638	1.606	1.573	1.538	1.499	1.456
40	2.835	2.440	2.226	2.091	1.997	1.927	1.873	1.829	1.793	1.763	1.715	1.662	1.605	1.574	1.541	1.506	1.467	1.425	1.377
60	2.791	2.393	2.177	2.041	1.946	1.875	1.819	1.775	1.738	1.707	1.657	1.603	1.543	1.511	1.476	1.437	1.395	1.348	1.291
120	2.748	2.347	2.130	1.992	1.896	1.824	1.767	1.722	1.684	1.652	1.601	1.545	1.482	1.447	1.409	1.368	1.320	1.265	1.193
1000+	2.706	2.303	2.084	1.945	1.847	1.774	1.717	1.670	1.632	1.599	1.546	1.487	1.421	1.383	1.342	1.295	1.240	1.169	1.000

(2) For a 95% confidence F-test, use the following table to compare F to the F_{crit95} values tabulated versus (N–1) and (N_{ref} –1). If F is less than F_{crit95}, then F passes the F-test at 95% confidence.

TABLE 3 OF § 1065.602—CRITICAL F VALUES, F_{crit95}, VERSUS N–1 AND N_{ref}–1 AT 95 % CONFIDENCE

N–1	1	2	3	4	5	6	7	8	9	10	12	15	20	24	30	40	60	120	1000+
N_{ref}–1																			
1	161.4	199.5	215.7	224.5	230.1	233.9	236.7	238.8	240.5	241.8	243.9	245.9	248.0	249.0	250.1	251.1	252.2	253.2	254.3
2	18.51	19.00	19.16	19.24	19.29	19.33	19.35	19.37	19.38	19.39	19.41	19.42	19.44	19.45	19.46	19.47	19.47	19.48	19.49
3	10.12	9.552	9.277	9.117	9.014	8.941	8.887	8.845	8.812	8.786	8.745	8.703	8.660	8.639	8.617	8.594	8.572	8.549	8.526
4	7.709	6.944	6.591	6.388	6.256	6.163	6.094	6.041	5.999	5.964	5.912	5.858	5.803	5.774	5.746	5.717	5.688	5.658	5.628
5	6.608	5.786	5.410	5.192	5.050	4.950	4.876	4.818	4.773	4.735	4.678	4.619	4.558	4.527	4.496	4.464	4.431	4.399	4.365
6	5.987	5.143	4.757	4.534	4.387	4.284	4.207	4.147	4.099	4.060	4.000	3.938	3.874	3.842	3.808	3.774	3.740	3.705	3.669
7	5.591	4.737	4.347	4.120	3.972	3.866	3.787	3.726	3.677	3.637	3.575	3.511	3.445	3.411	3.376	3.340	3.304	3.267	3.230
8	5.318	4.459	4.066	3.838	3.688	3.581	3.501	3.438	3.388	3.347	3.284	3.218	3.150	3.115	3.079	3.043	3.005	2.967	2.928
9	5.117	4.257	3.863	3.633	3.482	3.374	3.293	3.230	3.179	3.137	3.073	3.006	2.937	2.901	2.864	2.826	2.787	2.748	2.707
10	4.965	4.103	3.708	3.478	3.326	3.217	3.136	3.072	3.020	2.978	2.913	2.845	2.774	2.737	2.700	2.661	2.621	2.580	2.538
11	4.844	3.982	3.587	3.357	3.204	3.095	3.012	2.948	2.896	2.854	2.788	2.719	2.646	2.609	2.571	2.531	2.490	2.448	2.405
12	4.747	3.885	3.490	3.259	3.106	2.996	2.913	2.849	2.796	2.753	2.687	2.617	2.544	2.506	2.466	2.426	2.384	2.341	2.296
13	4.667	3.806	3.411	3.179	3.025	2.915	2.832	2.767	2.714	2.671	2.604	2.533	2.459	2.420	2.380	2.339	2.297	2.252	2.206
14	4.600	3.739	3.344	3.112	2.958	2.848	2.764	2.699	2.646	2.602	2.534	2.463	2.388	2.349	2.308	2.266	2.223	2.178	2.131
15	4.543	3.682	3.287	3.056	2.901	2.791	2.707	2.641	2.588	2.544	2.475	2.403	2.328	2.288	2.247	2.204	2.160	2.114	2.066
16	4.494	3.634	3.239	3.007	2.852	2.741	2.657	2.591	2.538	2.494	2.425	2.352	2.276	2.235	2.194	2.151	2.106	2.059	2.010
17	4.451	3.592	3.197	2.965	2.810	2.699	2.614	2.548	2.494	2.450	2.381	2.308	2.230	2.190	2.148	2.104	2.058	2.011	1.960
18	4.414	3.555	3.160	2.928	2.773	2.661	2.577	2.510	2.456	2.412	2.342	2.269	2.191	2.150	2.107	2.063	2.017	1.968	1.917
19	4.381	3.522	3.127	2.895	2.740	2.628	2.544	2.477	2.423	2.378	2.308	2.234	2.156	2.114	2.071	2.026	1.980	1.930	1.878
20	4.351	3.493	3.098	2.866	2.711	2.599	2.514	2.447	2.393	2.348	2.278	2.203	2.124	2.083	2.039	1.994	1.946	1.896	1.843
21	4.325	3.467	3.073	2.840	2.685	2.573	2.488	2.421	2.366	2.321	2.250	2.176	2.096	2.054	2.010	1.965	1.917	1.866	1.812
22	4.301	3.443	3.049	2.817	2.661	2.549	2.464	2.397	2.342	2.297	2.226	2.151	2.071	2.028	1.984	1.938	1.889	1.838	1.783
23	4.279	3.422	3.028	2.796	2.640	2.528	2.442	2.375	2.320	2.275	2.204	2.128	2.048	2.005	1.961	1.914	1.865	1.813	1.757
24	4.260	3.403	3.009	2.776	2.621	2.508	2.423	2.355	2.300	2.255	2.183	2.108	2.027	1.984	1.939	1.892	1.842	1.790	1.733
25	4.242	3.385	2.991	2.759	2.603	2.490	2.405	2.337	2.282	2.237	2.165	2.089	2.008	1.964	1.919	1.872	1.822	1.768	1.711
26	4.225	3.369	2.975	2.743	2.587	2.474	2.388	2.321	2.266	2.220	2.148	2.072	1.990	1.946	1.901	1.853	1.803	1.749	1.691
27	4.210	3.354	2.960	2.728	2.572	2.459	2.373	2.305	2.250	2.204	2.132	2.056	1.974	1.930	1.884	1.836	1.785	1.731	1.672
28	4.196	3.340	2.947	2.714	2.558	2.445	2.359	2.291	2.236	2.190	2.118	2.041	1.959	1.915	1.869	1.820	1.769	1.714	1.654
29	4.183	3.328	2.934	2.701	2.545	2.432	2.346	2.278	2.223	2.177	2.105	2.028	1.945	1.901	1.854	1.806	1.754	1.698	1.638
30	4.171	3.316	2.922	2.690	2.534	2.421	2.334	2.266	2.211	2.165	2.092	2.015	1.932	1.887	1.841	1.792	1.740	1.684	1.622
40	4.085	3.232	2.839	2.606	2.450	2.336	2.249	2.180	2.124	2.077	2.004	1.925	1.839	1.793	1.744	1.693	1.637	1.577	1.509
60	4.001	3.150	2.758	2.525	2.368	2.254	2.167	2.097	2.040	1.993	1.917	1.836	1.748	1.700	1.649	1.594	1.534	1.467	1.389
120	3.920	3.072	2.680	2.447	2.290	2.175	2.087	2.016	1.959	1.911	1.834	1.751	1.659	1.608	1.554	1.495	1.429	1.352	1.254
1000+	3.842	2.996	2.605	2.372	2.214	2.099	2.010	1.938	1.880	1.831	1.752	1.666	1.571	1.517	1.459	1.394	1.318	1.221	1.000

(h) *Slope*. Calculate a least-squares regression slope, a_{1y}, using one of the following two methods:

(1) If the intercept floats, *i.e.*, is not forced through zero:

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$$a_{1y} = \frac{\sum_{i=1}^{N}(y_i - \overline{y}) \cdot \left(y_{\mathrm{ref}i} - \overline{y}_{\mathrm{ref}}\right)}{\sum_{i=1}^{N}(y_{\mathrm{ref}i} - \overline{y}_{\mathrm{ref}})^2}$$

Eq. 1065.602-9

Example:
$N = 6000$
$y_1 = 2045.8$
$\bar{y} = 1050.1$
$y_{\mathrm{ref}1} = 2045.0$
$\bar{y}_{\mathrm{ref}} = 1055.3$

$$a_{1y} = \frac{(2045.8 - 1050.1) \cdot (2045.0 - 1055.3) + \ldots + (y_{6000} - 1050.1) \cdot (y_{\mathrm{ref}6000} - 1055.3)}{(2045.0 - 1055.3)^2 + \ldots + (y_{\mathrm{ref}6000} - 1055.3)^2}$$

$a_{1y} = 1.0110$

(2) If the intercept is forced through zero, *e.g.,* for verifying proportional sampling:

$$a_{1y} = \frac{\sum_{i=1}^{N} y_i \cdot y_{\mathrm{ref}i}}{\sum_{i=1}^{N} y_{\mathrm{ref}i}^2}$$

Eq. 1065.602-10

Example:
$N = 6000$
$y_1 = 2045.8$
$y_{\mathrm{ref}1} = 2045.0$

$$a_{1y} = \frac{2045.8 \cdot 2045.0 + \ldots + y_{6000} \cdot y_{\mathrm{ref}\,6000}}{2045.0^2 + \ldots + y_{\mathrm{ref}\,6000}^2}$$

$a_{1y} = 1.0110$

(i) *Intercept.* If the intercept floats, *i.e.,* is not forced through zero, calculate a least-squares regression intercept, a_{0y}, as follows:

$$a_{0y} = \overline{y} - \left(a_{1y} \cdot \overline{y}_{\mathrm{ref}}\right)$$

Eq. 1065.602-11

Example:
$\bar{y} = 1050.1$
$a_{1y} = 1.0110$
$\bar{y}_{\mathrm{ref}} = 1055.3$
$a_{0y} = 1050.1 - (1.0110 \cdot 1055.3)$
$a_{0y} = -16.8083$

(j) *Standard estimate of error.* Calculate a standard estimate of error, *SEE,* using one of the following two methods:

(1) If the intercept floats, *i.e.,* is not forced through zero:

$$SEE_y = \sqrt{\frac{\sum_{i=1}^{N}\left(y_i - a_{0y} - (a_{1y} \cdot y_{\mathrm{ref}i})\right)^2}{N - 2}}$$

Eq. 1065.602-12

Example:
$N = 6000$
$y_1 = 2045.8$
$a_{0y} = -16.8083$
$a_{1y} = 1.0110$
$y_{ref1} = 2045.0$

$$SEE_y = \sqrt{\frac{\left(2045.8-(-16.8083)-(1.0110\cdot 2045.0)\right)^2+\ldots\left(y_{6000}-(-16.8083)-(1.0110\cdot y_{ref\,6000})\right)^2}{6000-2}}$$

$SEE_y = 5.348$

(2) If the intercept is forced through zero, e.g., for verifying proportional sampling:

$$SEE_y = \sqrt{\frac{\sum_{i=1}^{N}\left(y_i - a_{1y}\cdot y_{refi}\right)^2}{N-1}}$$

Eq. 1065.602-13

Example:
$N = 6000$
$y_1 = 2045.8$
$a_{1y} = 1.0110$
$y_{ref1} = 2045.0$

$$SEE_y = \sqrt{\frac{\left(2045.8-1.0110\cdot 2045.0\right)^2+\ldots+\left(y_{6000}-1.0110\cdot y_{ref\,6000}\right)^2}{6000-1}}$$

$SEE_y = 5.347$

(k) *Coefficient of determination.* Calculate a coefficient of determination, r_y^2, as follows:

$$r_y^2 = 1-\frac{\sum_{i=1}^{N}\left(y_i - a_{0y} - (a_{1y}\cdot y_{refi})\right)^2}{\sum_{i=1}^{N}\left(y_i-\bar{y}\right)^2}$$

Eq. 1065.602-14

Example:
$N = 6000$
$y_1 = 2045.8$
$a_{0y} = -16.8083$
$a_{1y} = 1.0110$
$y_{ref1} = 2045.0$
$\bar{y} = 1480.5$

$$r_y^2 = 1-\frac{\left(2045.8-(-16.8083)-(1.0110\times 2045.0)\right)^2+\ldots\left(y_{6000}-(-16.8083)-(1.0110\cdot y_{ref6000})\right)^2}{\left(2045.8-1480.5\right)^2+\ldots\left(y_{6000}-1480.5\right)^2}$$

$r_y^2 = 0.9859$

(l) *Flow-weighted mean concentration.* In some sections of this part, you may need to calculate a flow-weighted mean concentration to determine the applicability of certain provisions. A flow-weighted mean is the mean of a quantity after it is weighted proportional to a corresponding flow rate. For example, if a gas concentration is measured continuously from the raw exhaust of an engine, its flow-weighted mean concentration is the sum of the products of each recorded concentration times its respective exhaust molar flow rate, divided by the sum of the recorded flow rate values. As another example, the bag concentration from a CVS system is the same as the flow-weighted mean concentration because the CVS system itself flow-weights the bag

concentration. You might already expect a certain flow-weighted mean concentration of an emission at its standard based on previous testing with similar engines or testing with similar equipment and instruments. If you need to estimate your expected flow-weighted mean concentration of an emission at its standard, we recommend using the following examples as a guide for how to estimate the flow-weighted mean concentration expected at the standard. Note that these examples are not exact and that they contain assumptions that are not always valid. Use good engineering judgment to determine if you can use similar assumptions.

(1) To estimate the flow-weighted mean raw exhaust NO_X concentration from a turbocharged heavy-duty compression-ignition engine at a NO_X standard of 2.5 g/(kW·hr), you may do the following:

(i) Based on your engine design, approximate a map of maximum torque versus speed and use it with the applicable normalized duty cycle in the standard-setting part to generate a reference duty cycle as described in § 1065.610. Calculate the total reference work, W_{ref}, as described in § 1065.650. Divide the reference work by the duty cycle's time interval, $\Delta t_{dutycycle}$, to determine mean reference power, $\bar{P}_{ref}$.

(ii) Based on your engine design, estimate maximum power, P_{max}, the design speed at maximum power, f_{nmax}, the design maximum intake manifold boost pressure, p_{inmax}, and temperature, T_{inmax}. Also, estimate a mean fraction of power that is lost due to friction and pumping, $\bar{P}_{frict}$. Use this information along with the engine displacement volume, V_{disp}, an approximate volumetric efficiency, η_V, and the number of engine strokes per power stroke (two-stroke or four-stroke), N_{stroke}, to estimate the maximum raw exhaust molar flow rate,

$\dot{n}_{exhmax}$.

(iii) Use your estimated values as described in the following example calculation:

$$\overline{x}_{exp} = \frac{e_{std} \cdot W_{ref}}{M \cdot \dot{n}_{exhmax} \cdot \Delta t_{duty\ cycle} \cdot \left(\frac{\overline{P}_{ref} + \left(\overline{P}_{frict} \cdot P_{max} \right)}{P_{max}} \right)}$$

Eq. 1065.602-15

$$\dot{n}_{exhmax} = \frac{p_{max} \cdot V_{disp} \cdot f_{nmax} \cdot \frac{2}{N_{stroke}} \cdot \eta_V}{R \cdot T_{max}}$$

Eq. 1065.602-16

Example:

e_{NOx} = 2.5 g/(kW·hr)
W_{ref} = 11.883 kW·hr
M_{NOx} = 46.0055 g/mol = $46.0055 \cdot 10^{-6}$ g/µmol
$\Delta t_{dutycycle}$ = 20 min = 1200 s
$\bar{P}_{ref}$ = 35.65 kW
$\bar{P}_{frict}$= 15%
P_{max} = 125 kW
p_{max} = 300 kPa = 300000 Pa
V_{disp} = 3.0 l = 0.0030 m³/r
f_{nmax} = 2800 r/min = 46.67 r/s
N_{stroke} = 4
η_V = 0.9
R = 8.314472 J/(mol·K)
T_{max} = 348.15 K

$$\dot{n}_{exhmax} = \frac{300000 \cdot 0.0030 \cdot 46.67 \cdot \frac{2}{4} \cdot 0.9}{8.314472 \cdot 348.15}$$

$\dot{n}_{exhmax}$ = 6.53 mol/s

$$\overline{x}_{exp} = \frac{2.5 \cdot 11.883}{46.0055 \cdot 10^{-6} \cdot 6.53 \cdot 1200 \cdot \left(\frac{35.65 + \left(0.15 \cdot 125 \right)}{125} \right)}$$

$$\overline{x}_{exp} = 189.4\ \mu mol/mol$$

(2) To estimate the flow-weighted mean NMHC concentration in a CVS from a naturally aspirated nonroad spark-ignition engine at an NMHC standard of 0.5 g/(kW·hr), you may do the following:

(i) Based on your engine design, approximate a map of maximum torque versus speed and use it with the

applicable normalized duty cycle in the standard-setting part to generate a reference duty cycle as described in § 1065.610. Calculate the total reference work, W_{ref}, as described in § 1065.650.

(ii) Multiply your CVS total molar flow rate by the time interval of the duty cycle, $\Delta t_{dutycycle}$. The result is the total diluted exhaust flow of the n_{dexh}.

(iii) Use your estimated values as described in the following example calculation:

$$\overline{x}_{NMHC} = \frac{e_{std} \cdot W_{ref}}{M \cdot \dot{n}_{dexh} \cdot \Delta t_{duty\ cycle}}$$

Eq. 1065.602-17

Example:

e_{NMHC} = 1.5 g/(kW·hr)

W_{ref} = 5.389 kW·hr

M_{NMHC} = 13.875389 g/mol = 13.875389·10^{-6} g/μmol

$\dot{n}$ = 6.021 mol/s

$\Delta t_{dutycycle}$ = 30 min = 1800 s

$$\overline{x}_{NMHC} = \frac{1.5 \cdot 5.389}{13.875389 \cdot 10^{-6} \cdot 6.021 \cdot 1800}$$

$$\overline{x}_{NMHC} = 53.8\ \mu mol/mol$$

■ 340. Amend § 1065.610 by revising paragraph (a)(1)(iv), paragraph (a)(2) introductory text, and paragraph (d)(3) introductory text to read as follows:

§ 1065.610 Duty cycle generation.

* * * * *

(a) * * *

(1) * * *

(iv) Transform the map into a normalized power-versus-speed map by dividing power terms by P_{max} and dividing speed terms by f_{nPmax}. Use the following equation to calculate a quantity representing the sum of squares from the normalized map:

$$\text{Sum of squares} = f_{nnorm\,i}^2 + P_{norm\,i}^2$$

Eq. 1065.610-1

Where:

i = an indexing variable that represents one recorded value of an engine map.

$f_{nnorm\,i}$ = an engine speed normalized by dividing it by f_{nPmax}.

$P_{norm\,i}$ = an engine power normalized by dividing it by P_{max}.

* * * * *

(2) For engines with a high-speed governor that will be subject to a reference duty cycle that specifies normalized speeds greater than 100%, calculate an alternate maximum test speed, $f_{ntest,alt}$, as specified in this paragraph (a)(2). If $f_{ntest,alt}$ is less than the measured maximum test speed, f_{ntest}, determined in paragraph (a)(1) of this section, replace f_{ntest} with $f_{ntest,alt}$. In this case, $f_{ntest,alt}$ becomes the ''maximum test speed'' for that engine for all duty-cycles. Note that § 1065.510 allows you to apply an optional declared maximum test speed to the final measured maximum test speed determined as an outcome of the comparison between f_{ntest}, and $f_{ntest,alt}$ in this paragraph (a)(2). Determine $f_{ntest,alt}$ as follows:

* * * * *

(d) * * *

(3) *Required deviations.* We require the following deviations for variable-speed engines intended primarily for propulsion of a vehicle with an automatic transmission where that engine is subject to a transient duty cycle with idle operation. These deviations are intended to produce a more representative transient duty cycle for these applications. For steady-state duty cycles or transient duty cycles with no idle operation, these requirements do not apply. Idle points for steady state duty cycles of such engines are to be run at conditions simulating neutral or park on the transmission. You may develop an alternate procedure for adjusting CITT as a function of speed, consistent with good engineering judgment.

* * * * *

■ 341. Amend § 1065.640 by revising paragraphs (a), (b)(3), (d)(1), and (d)(3) to read as follows:

§ 1065.640 Flow meter calibration calculations.

* * * * *

(a) *Reference meter conversions.* The calibration equations in this section use molar flow rate, $\dot{n}_{ref}$, as a reference quantity. If your reference meter outputs a flow rate in a different quantity, such as standard volume rate, $\dot{V}_{stdref}$, actual volume rate, $\dot{V}_{actref}$, or mass rate, $\dot{m}_{ref}$, convert your reference meter output to a molar flow rate using the following equations, noting that while values for volume rate, mass rate, pressure, temperature, and molar mass may change during an emission test, you should ensure that they are as constant as practical for each individual set point during a flow meter calibration:

$$\dot{n}_{ref} = \frac{\dot{V}_{stdref} \cdot p_{std}}{T_{std} \cdot R} = \frac{\dot{V}_{actref} \cdot p_{act}}{T_{act} \cdot R} = \frac{\dot{m}_{ref}}{M_{mix}}$$

Eq. 1065.640-1

Where:

$\dot{n}_{ref}$ = reference molar flow rate.
$\dot{V}_{stdref}$ = reference volume flow rate corrected to a standard pressure and a standard temperature.
$\dot{V}_{actref}$ = reference volume flow rate at the actual pressure and temperature of the flow rate.
$\dot{m}_{ref}$ = reference mass flow.
p_{std} = standard pressure.
p_{act} = actual pressure of the flow rate.
T_{std} = standard temperature.
T_{act} = actual temperature of the flow rate.
R = molar gas constant.
M_{mix} = molar mass of the flow rate.

Example 1:

p_{std} = 29.9213 in Hg @ 32 °F = 101.325 kPa = 101325 Pa = 101325 kg/(m·s²)
T_{std} = 68.0 °F = 293.15 K
R = 8.314472 J/(mol·K) = 8.314472 (m²·kg)/(s²·mol·K)

$$\dot{n}_{ref} = \frac{0.471948 \cdot 101325}{293.15 \cdot 8.314472}$$

$\dot{n}_{ref}$ = 19.619 mol/s

Example 2:

$\dot{m}_{ref}$ = 17.2683 kg/min = 287.805 g/s
M_{mix} = 28.7805 g/mol

$$\dot{n}_{ref} = \frac{287.805}{28.7805}$$

$\dot{n}_{ref}$ = 10.0000 mol/s

(b) * * *

(3) Perform a least-squares regression of V_{rev}, versus K_s, by calculating slope, a_1, and intercept, a_0, as described for a floating intercept in § 1065.602.

* * * * *

(d) * * *

(1) Calculate the Reynolds number, $Re^{\#}$, for each reference molar flow rate, $\dot{n}_{ref}$, using the throat diameter of the venturi, d_t. Because the dynamic viscosity, μ, is needed to compute $Re^{\#}$, you may use your own fluid viscosity model to determine μ for your calibration gas (usually air), using good engineering judgment. Alternatively, you may use the Sutherland three-coefficient viscosity model to approximate μ, as shown in the following sample calculation for $Re^{\#}$:

$$Re^{\#} = \frac{4 \cdot M_{mix} \cdot \dot{n}_{ref}}{\pi \cdot d_t \cdot \mu}$$

Eq. 1065.640-10

Where, using the Sutherland three-coefficient viscosity model as captured in Table 4 of this section:

$$\mu = \mu_0 \cdot \left(\frac{T_{in}}{T_0}\right)^{\frac{3}{2}} \cdot \left(\frac{T_0 + S}{T_{in} + S}\right)$$

Eq. 1065.640-11

Where:

μ_0 = Sutherland reference viscosity.
T_0 = Sutherland reference temperature.
S = Sutherland constant.

TABLE 4 OF § 1065.640—SUTHERLAND THREE-COEFFICIENT VISCOSITY MODEL PARAMETERS

Gas [a]	μ_0	T_0	S	Temperature range within ±2% error [b]	Pressure limit [b]
	kg/(m·s)	K	K	K	kPa
Air	$1.716 \cdot 10^{-5}$	273	111	170 to 1900	≤1800
CO_2	$1.370 \cdot 10^{-5}$	273	222	190 to 1700	≤3600
H_2O	$1.12 \cdot 10^{-5}$	350	1064	360 to 1500	≤10000
O_2	$1.919 \cdot 10^{-5}$	273	139	190 to 2000	≤2500
N_2	$1.663 \cdot 10^{-5}$	273	107	100 to 1500	≤1600

[a] Use tabulated parameters only for the pure gases, as listed. Do not combine parameters in calculations to calculate viscosities of gas mixtures.
[b] The model results are valid only for ambient conditions in the specified ranges.

Example:

$\mu_0 = 1.716 \cdot 10^{-5}$ kg/(m·s)

$T_0 = 273$ K

$S = 111$ K

$$\mu = 1.716 \cdot 10^{-5} \cdot \left(\frac{298.15}{273}\right)^{\frac{3}{2}} \cdot \left(\frac{273+111}{298.15+111}\right)$$

$\mu = 1.838 \cdot 10^{-5}$ kg/(m·s)

$M_{mix} = 28.7805$ g/mol = 0.0287805 kg/mol

$\dot{n}_{ref} = 57.625$ mol/s

$d_t = 152.4$ mm = 0.1524 m

$T_{in} = 298.15$ K

$$Re^{\#} = \frac{4 \cdot 0.0287805 \cdot 57.625}{3.14159 \cdot 0.1524 \cdot 1.838 \cdot 10^{-5}}$$

$Re^{\#} = 7.538 \cdot 10^5$

* * * * *

(3) Perform a least-squares regression analysis to determine the best-fit coefficients for the equation and calculate *SEE* as described in § 1065.602. When using the example equation above, treat C_d as y and the radical term as y_{ref} and use Eq. 1065.602–12 to calculate *SEE*. When using another mathematical expression, substitute that expression into the numerator of Eq. 1065.602–12 and replace the 2 in the denominator with the number of coefficients in the mathematical expression.

* * * * *

■ 342. Amend § 1065.642 by revising paragraphs (b) and (c)(1) to read as follows:

§ 1065.642 PDP, SSV, and CFV molar flow rate calculations.

* * * * *

(b) *SSV molar flow rate.* Calculate SSV molar flow rate, $\dot{n}$, as follows:

$$\dot{n} = C_d \cdot C_f \cdot \frac{A_t \cdot p_{in}}{\sqrt{Z \cdot M_{mix} \cdot R \cdot T_{in}}}$$

Eq. 1065.642-3

Where:

C_d = discharge coefficient, as determined based on the C_d versus $Re^{\#}$ equation in § 1065.640(d)(2).

C_f = flow coefficient, as determined in § 1065.640(c)(3)(ii).

A_t = venturi throat cross-sectional area.

p_{in} = static absolute pressure at the venturi inlet.

Z = compressibility factor.

M_{mix} = molar mass of gas mixture.

R = molar gas constant.

T_{in} = absolute temperature at the venturi inlet.

Example:

$A_t = 0.01824$ m²

$p_{in} = 99.132$ kPa = 99132 Pa = 99132 kg/(m·s²)

$Z = 1$

$M_{mix} = 28.7805$ g/mol = 0.0287805 kg/mol

$R = 8.314472$ J/(mol·K) = 8.314472 (m²·kg)/(s²·mol·K)

$T_{in} = 298.15$ K

$Re^{\#} = 7.232 \cdot 10^5$

$\gamma = 1.399$

$\beta = 0.8$

$\Delta p = 2.312$ kPa

Using Eq. 1065.640–7,

$r_{ssv} = 0.997$

Using Eq. 1065.640–6,

$C_f = 0.274$

Using Eq. 1065.640–5,

$C_d = 0.990$

$$\dot{n} = 0.990 \cdot 0.274 \cdot \frac{0.01824 \cdot 99132}{\sqrt{1 \cdot 0.0287805 \cdot 8.314472 \cdot 298.15}}$$

$\dot{n} = 58.173$ mol/s

(c) * * *

(1) To calculate $\dot{n}$ through one venturi or one combination of venturis, use its respective mean C_d and other constants you determined according to § 1065.640 and calculate $\dot{n}$ as follows:

$$\dot{n} = C_d \cdot C_f \cdot \frac{A_t \cdot p_{in}}{\sqrt{Z \cdot M_{mix} \cdot R \cdot T_{in}}}$$

Eq. 1065.642-4

Where:

C_f = flow coefficient, as determined in § 1065.640(c)(3).

Example:

$C_d = 0.985$

$C_f = 0.7219$

$A_t = 0.00456$ m²

$p_{in} = 98.836$ kPa = 98836 Pa = 98836 kg/(m·s²)

$Z = 1$

$M_{mix} = 28.7805$ g/mol = 0.0287805 kg/mol

$R = 8.314472$ J/(mol·K) = 8.314472 (m²·kg)/(s²·mol·K)

$T_{in} = 378.15$ K

$$\dot{n} = 0.985 \cdot 0.7219 \cdot \frac{0.00456 \cdot 98836}{\sqrt{1 \cdot 0.0287805 \cdot 8.314472 \cdot 378.15}}$$

$\dot{n}$ = 33.690 mol/s

* * * * *

■ 343. Add § 1065.643 to read as follows:

§ 1065.643 Carbon balance error verification calculations.

This section describes the equations for calculating carbon balance error quantities used in the carbon balance error verification described in § 1065.543. You may use rectangular or trapezoidal integration methods to calculate masses and amounts over a test interval from continuously measured or calculated mass and molar flow rates. Calculate the mass of carbon in all of the carbon-carrying fluid streams, intake air into the system, and exhaust emissions over the test interval. You may use ECM broadcast signals for DEF flow rate to calculate the mass of carbon into the stream from the DEF system. You may use ECM broadcast fuel flow rate for field testing to calculate the mass of carbon in the fuel stream into the system.

(a) Determine the masses of all the carbon-carrying fluid streams (fuel and other (*e.g.*, DEF)) into the system over each test interval, m_{fluidj}, where j is an indexing variable that represents one carbon-carrying fluid stream.

(b) For each test interval calculate the mass of carbon in all of the carbon-carrying fluid streams flowing into the system as follows:

$$m_{\mathrm{Cfluid}} = \sum_{j=1}^{M} \left(w_{\mathrm{C}j} \cdot m_{\mathrm{fluid}j} \right)$$

Eq. 1065.643-1

Where:

w_{C} = carbon mass fraction of the carbon-carrying fluid stream as determined in § 1065.655(d).

m_{fluid} = the mass of the carbon-carrying fluid stream determined over the test interval.

j = an indexing variable that represents one carbon-carrying fluid stream.

M = total number of carbon-carrying fluid streams into the system over the test interval.

Example:

w_{Cfuel} = 0.869

w_{CDEF} = 0.065

m_{fuel} = 1119.6 g

m_{DEF} = 36.8 g

M = 2

m_{Cfluid} = 0.869·1119.6 + 0.065·36.8 = 975.3 g

(c) Calculate the mass of carbon in the intake air that flowed into the system, m_{Cair}, for each test interval, using one of the methods below in order of preference. Use the first method where all the inputs are available.

(1) When the amount of intake air is measured over the test interval:

$$m_{\mathrm{Cair}} = M_{\mathrm{C}} \cdot n_{\mathrm{int}} \cdot x_{\mathrm{CO2int}}$$

Eq. 1065.643-2

Where:

M_{C} = molar mass of carbon.

n_{int} = the measured amount of intake air over the test interval.

x_{CO2int} = the amount of intake air CO_2 per mole of intake air. You may calculate x_{CO2int} using Eq. 1065.655–10 and $x_{\mathrm{CO2intdry}}$ = 375 µmol/mol, but we recommend measuring the actual concentration in the intake air.

Example:

M_{C} = 12.0107 g/mol

n_{int} = 62862 mol

x_{CO2int} = 369 µmol/mol = 0.000369 mol/mol

m_{Cair} = 12.0107·62862·0.000369 = 278.6 g

(2) When the amount of raw exhaust is measured or calculated, and chemical balance terms are calculated for the raw exhaust:

$$m_{\mathrm{Cair}} = M_{\mathrm{C}} \cdot n_{\mathrm{exh}} \cdot \left(1 - x_{\mathrm{H2Oexh}}\right) \cdot x_{\mathrm{CO2int}} \cdot \left(x_{\mathrm{dil/exhdry}} + x_{\mathrm{int/exhdry}}\right)$$

Eq. 1065.643-3

Where:

M_{C} = molar mass of carbon.

n_{exh} = the calculated or measured amount of raw exhaust over the test interval.

x_{H2Oexh} = amount of H_2O in exhaust per mole of exhaust.

x_{CO2int} = the amount of intake air CO_2 per mole of intake air. You may calculate x_{CO2int} using Eq. 1065.655–10 and $x_{\mathrm{CO2intdry}}$ = 375 µmol/mol, but we recommend measuring the actual concentration in the intake air.

$x_{\mathrm{dil/exhdry}}$ = amount of excess air per mole of dry exhaust. Note that for the chemical balance calculation from raw exhaust, $x_{\mathrm{CO2dil}} = x_{\mathrm{CO2int}}$ and $x_{\mathrm{H2Odil}} = x_{\mathrm{H2Oint}}$, as excess air and intake air have the same composition.

$x_{\mathrm{int/exhdry}}$ = amount of intake air required to produce actual combustion products per mole of dry exhaust.

Example:

M_C = 12.0107 g/mol
n_{exh} = 62862 mol
x_{H2Oexh} = 0.034 mol/mol
x_{CO2int} = 369 µmol/mol = 0.000369 mol/mol
$x_{dil/exhdry}$ = 0.570 mol/mol
$x_{int/exhdry}$ = 0.465 mol/mol
m_{Cair} = 12.0107·62862·(1 − 0.034)·0.000369·(0.570 + 0.465) = 278.6 g

(3) When the amount of raw exhaust is measured:

$$m_{Cair} = M_C \cdot n_{exh} \cdot x_{CO2int}$$

Eq. 1065.643-4

Where:

M_C = molar mass of carbon.
n_{exh} = the measured amount of raw exhaust over the test interval.
x_{CO2int} = the amount of intake air CO_2 per mole of intake air. You may calculate x_{CO2int} using Eq. 1065.655–10 and $x_{CO2intdry}$ = 375 µmol/mol, but we recommend measuring the actual concentration in the intake air.

Example:

M_C = 12.0107 g/mol
n_{exh} = 62862 mol
x_{CO2int} = 369 µmol/mol = 0.000369 mol/mol
m_{Cair} = 12.0107·62862·0.000369 = 278.6 g

(4) When the amount of diluted exhaust and dilution air are measured:

$$m_{Cair} = M_C \cdot \left(n_{dexh} - n_{dil}\right) \cdot x_{CO2int}$$

Eq. 1065.643-5

Where:

M_C = molar mass of carbon.
n_{dexh} = the measured amount of diluted exhaust over the test interval as determined in § 1065.642.
n_{dil} = the measured amount of dilution air over the test interval as determined in § 1065.667(b).
x_{CO2int} = the amount of intake air CO_2 per mole of intake air. You may calculate x_{CO2int} using Eq. 1065.655–10 and $x_{CO2intdry}$ = 375 µmol/mol, but we recommend measuring the actual concentration in the intake air.

Example:

M_C = 12.0107 g/mol
n_{dexh} = 942930 mol
n_{dil} = 880068 mol
x_{CO2int} = 369 µmol/mol = 0.000369 mol/mol
m_{Cair} = 12.0107·(942930 − 880068)·0.000369 = 278.6 g

(5) When the amount of intake air can be determined from recorded ECM broadcast signals, use ECM broadcast intake air to determine m_{Cair} as described in paragraph (c)(1) of this section.

(6) When diluted exhaust is measured, use a calculated amount of dilution air over the test interval as determined in § 1065.667(d) instead of the measured amount of dilution air to determine m_{Cair} as described in paragraph (c)(4) of this section.

(d) Calculate the mass of carbon in exhaust emissions, m_{Cexh}, for each test interval as follows:

$$m_{Cexh} = M_C \cdot \left(\frac{m_{CO2}}{M_{CO2}} + \frac{m_{CO}}{M_{CO}} + \frac{m_{THC}}{M_{THC}}\right)$$

Eq. 1065.643-6

Where:

M_C = molar mass of carbon.
M_{CO2} = molar mass of carbon dioxide.
M_{CO} = molar mass of carbon monoxide.
M_{THC} = effective C_1 molar mass of total hydrocarbon as defined in § 1065.1005(f)(2).
m_{CO2} = is the mass of CO_2 over the test interval as determined in § 1065.650(c).
m_{CO} = is the mass of CO over the test interval as determined in § 1065.650(c).
m_{THC} = is the mass of THC over the test interval as determined in § 1065.650(c).

Example:

M_C = 12.0107 g/mol
M_{CO2} = 44.0095 g/mol
M_{CO} = 28.0101 g/mol
M_{THC} = 13.875389 g/mol
m_{CO2} = 4567 g
m_{CO} = 0.803 g
m_{THC} = 0.537 g

$$m_{Cexh} = 12.0107 \cdot \left(\frac{4567}{44.0095} + \frac{0.803}{28.0101} + \frac{0.537}{13.875389}\right) = 1247.2 \text{ g}$$

(e) Calculate carbon balance error quantities as follows:

(1) Calculate carbon mass absolute error, ε_{aC}, for a test interval as follows:

$$\epsilon_{aC} = m_{Cexh} - m_{Cfluid} - m_{Cair}$$

Eq. 1065.643-7

Where:

m_{Cexh} = mass of carbon in exhaust emissions over the test interval as determined in paragraph (d) of this section.
m_{Cfluid} = mass of carbon in all of the carbon-carrying fluid streams that flowed into the system over the test interval as determined in paragraph (b) of this section.
m_{Cair} = mass of carbon in the intake air that flowed into the system over the test interval as determined in paragraph (c) of this section.

Example:

m_{Cexh} = 1247.2 g
m_{Cfluid} = 975.3 g
m_{Cair} = 278.6 g
ε_{aC} = 1247.2 − 975.3 − 278.6 = −6.7 g

(2) Calculate carbon mass rate absolute error, ε_{aCrate}, for a test interval as follows:

$$\epsilon_{aCrate} = \frac{\epsilon_{aC}}{t}$$

Eq. 1065.643-8

Where:

t = duration of the test interval.

Example:

ε_{aC} = −6.7 g
t = 1202.2 s = 0.3339 hr

$$\epsilon_{aCrate} = \frac{-6.7}{0.3339} = -20.065 \text{ g/hr}$$

(3) Calculate carbon mass relative error, ε_{rC}, for a test interval as follows:

$$\epsilon_{rC} = \frac{\epsilon_{aC}}{m_{Cfluid} + m_{Cair}}$$

Eq. 1065.643-9

Example:

ε_{aC} = –6.7 g
m_{Cfliud} = 975.3 g
m_{Cair} = 278.6 g

$$\epsilon_{rC} = \frac{-6.7}{975.3 + 278.6} = -0.0053$$

(4) Calculate composite carbon mass relative error, ε_{rCcomp}, for a duty cycle with multiple test intervals as follows:

(i) Use the following equation to calculate, ε_{rCcomp}, for duty cycles with multiple test intervals of a prescribed duration, such as cold-start and hot-start transient cycles:

$$\epsilon_{rCcomp} = \frac{\sum_{i=1}^{N} WF_i \cdot \left(m_{Cexhi} - m_{Cfluidi} - m_{Cairi}\right)}{\sum_{i=1}^{N} WF_i \cdot \left(m_{Cfluidi} + m_{Cairi}\right)}$$

Eq. 1065.643-10

Where:

i = test interval number.
N = number of test intervals.
WF = weighting factor for the test interval as defined in the standard-setting part.
m_{Cexh} = mass of carbon in exhaust emissions over the test interval as determined in paragraph (d) of this section.
m_{Cfluid} = mass of carbon in all of the carbon-carrying fluid streams that flowed into the system over the test interval as determined in paragraph (b) of this section.
m_{Cair} = mass of carbon in the intake air that flowed into the system over the test interval as determined in paragraph (c) of this section.

Example:

N = 2
WF_1 = 1/7
WF_2 = 6/7
m_{Cexh1} = 1255.3 g
m_{Cexh2} = 1247.2 g
$m_{Cfluid1}$ = 977.8 g
$m_{Cfluid2}$ = 975.3 g
m_{Cair1} = 280.2 g
m_{Cair2} = 278.6 g

$$\epsilon_{rCcomp} = \frac{\frac{1}{7} \cdot \left(1255.3 - 977.8 - 280.2\right) + \frac{6}{7} \cdot \left(1247.2 - 975.3 - 278.6\right)}{\frac{1}{7} \cdot \left(977.8 + 280.2\right) + \frac{6}{7} \cdot \left(975.3 + 278.6\right)} = -0.0049$$

(ii) Use the following equation to calculate, ε_{rCcomp}, for duty cycles with multiple test intervals that allow use of varying duration, such as discrete-mode steady-state duty cycles:

$$\epsilon_{rCcomp} = \frac{\sum_{i=1}^{N} WF_i \cdot \frac{\left(m_{Cexhi} - m_{Cfluidi} - m_{Cairi}\right)}{t_i}}{\sum_{i=1}^{N} WF_i \cdot \frac{\left(m_{Cfluidi} + m_{Cairi}\right)}{t_i}}$$

Eq. 1065.643-11

Where:

t = duration of the test interval.

Example:

N = 2
WF_1 = 0.85
WF_2 = 0.15
m_{Cexh1} = 2.873 g
m_{Cexh2} = 0.125 g
$m_{Cfluid1}$ = 2.864 g
$m_{Cfluid2}$ = 0.095 g
m_{Cair1} = 0.023 g
m_{Cair2} = 0.024 g
t_1 = 123 s
t_2 = 306 s

$$\epsilon_{rCcomp} = \frac{0.85 \cdot \left(\frac{2.873 - 2.864 - 0.023}{123}\right) + 0.15 \cdot \left(\frac{0.125 - 0.095 - 0.024}{306}\right)}{0.85 \cdot \left(\frac{2.864 + 0.023}{123}\right) + 0.15 \cdot \left(\frac{0.095 + 0.024}{306}\right)} = -0.0047$$

■ 344. Amend § 1065.650 by revising paragraphs (b)(3), (c)(1) through (3), paragraph (d) introductory text, paragraphs (d)(7), (f)(2) and (g) to read as follows:

§ 1065.650 Emission calculations.

* * * * *

(b) * * *

(3) For field testing, you may calculate the ratio of total mass to total work, where these individual values are determined as described in paragraph (f) of this section. You may also use this approach for laboratory testing, consistent with good engineering judgment. Good engineering judgment dictates that this method not be used if there are any work flow paths described in § 1065.210 that cross the system boundary, other than the primary output shaft (crankshaft). This is a special case in which you use a signal linearly proportional to raw exhaust molar flow rate to determine a value proportional to total emissions. You then use the same linearly proportional signal to determine total work using a chemical balance of fuel, DEF, intake air, and exhaust as described in § 1065.655, plus information about your engine's brake-specific fuel consumption. Under this method, flow meters need not meet accuracy specifications, but they must meet the applicable linearity and repeatability specifications in subpart D or subpart J of this part. The result is a brake-specific emission value calculated as follows:

$$e = \frac{\tilde{m}}{\tilde{W}}$$

Eq. 1065.650-3

Example:

$\tilde{m}$ = 805.5 g
$\tilde{W}$ = 52.102 kW·hr
e_{CO} = 805.5/52.102
e_{CO} = 2.520 g/(kW·hr)

(c) * * *

(1) *Concentration corrections.* Perform the following sequence of preliminary calculations on recorded concentrations:

(i) Use good engineering judgment to time-align flow and concentration data to match transformation time, t_{50}, to within ±1 s.

(ii) Correct all gaseous emission analyzer concentration readings, including continuous readings, sample bag readings, and dilution air background readings, for drift as described in § 1065.672. Note that you must omit this step where brake-specific emissions are calculated without the drift correction for performing the drift validation according to § 1065.550(b). When applying the initial THC and CH_4 contamination readings according to § 1065.520(f), use the same values for both sets of calculations. You may also use as-measured values in the initial set of calculations and corrected values in the drift-corrected set of calculations as described in § 1065.520(f)(7).

(iii) Correct all THC and CH_4 concentrations for initial contamination as described in § 1065.660(a), including continuous readings, sample bags readings, and dilution air background readings.

(iv) Correct all concentrations measured on a ''dry'' basis to a ''wet'' basis, including dilution air background concentrations, as described in § 1065.659.

(v) Calculate all NMHC and CH_4 concentrations, including dilution air background concentrations, as described in § 1065.660.

(vi) For emission testing with an oxygenated fuel, calculate any HC concentrations, including dilution air background concentrations, as described in § 1065.665. See subpart I of this part for testing with oxygenated fuels.

(vii) Correct all the NO_X concentrations, including dilution air background concentrations, for intake-air humidity as described in § 1065.670.

(2) *Continuous sampling.* For continuous sampling, you must frequently record a continuously updated concentration signal. You may measure this concentration from a changing flow rate or a constant flow rate (including discrete-mode steady-state testing), as follows:

(i) *Varying flow rate.* If you continuously sample from a changing exhaust flow rate, time align and then multiply concentration measurements by the flow rate from which you extracted it. We consider the following to be examples of changing flows that require a continuous multiplication of concentration times molar flow rate: raw exhaust, exhaust diluted with a constant flow rate of dilution air, and CVS dilution with a CVS flow meter that does not have an upstream heat exchanger or electronic flow control. This multiplication results in the flow rate of the emission itself. Integrate the emission flow rate over a test interval to determine the total emission. If the total emission is a molar quantity, convert this quantity to a mass by multiplying it by its molar mass, *M.* The result is the mass of the emission, *m.* Calculate *m* for continuous sampling with variable flow using the following equations:

$$m = M \cdot \sum_{i=1}^{N} x_i \cdot \dot{n}_i \cdot \Delta t$$

Eq. 1065.650-4

Where:

$\Delta t = 1/f_{record}$ Eq. 1065.650–5

Example:

M_{NMHC} = 13.875389 g/mol
N = 1200
x_{NMHC1} = 84.5 μmol/mol = $84.5 \cdot 10^{-6}$ mol/mol
x_{NMHC2} = 86.0 μmol/mol = $86.0 \cdot 10^{-6}$ mol/mol
$\dot{n}_{exh1}$ = 2.876 mol/s
$\dot{n}_{exh2}$ = 2.224 mol/s
f_{record} = 1 Hz

Using Eq. 1065.650–5,

$\Delta t = 1/1 = 1$ s
$m_{NMHC} = 13.875389 \cdot (84.5 \cdot 10^{-6} \cdot 2.876 + 86.0 \cdot 10^{-6} \cdot 2.224 + \ldots + x_{NMHC1200} \cdot \dot{n}_{exh}) \cdot 1$
m_{NMHC} = 25.23 g

(ii) *Constant flow rate.* If you continuously sample from a constant exhaust flow rate, use the same emission calculations described in paragraph (c)(2)(i) of this section or calculate the mean or flow-weighted concentration recorded over the test interval and treat the mean as a batch sample, as described in paragraph (c)(3)(ii) of this section. We consider the following to be examples of constant exhaust flows: CVS diluted exhaust with a CVS flow meter that has either an upstream heat exchanger, electronic flow control, or both.

(3) *Batch sampling.* For batch sampling, the concentration is a single value from a proportionally extracted batch sample (such as a bag, filter, impinger, or cartridge). In this case, multiply the mean concentration of the batch sample by the total flow from which the sample was extracted. You may calculate total flow by integrating a changing flow rate or by determining the mean of a constant flow rate, as follows:

(i) *Varying flow rate.* If you collect a batch sample from a changing exhaust flow rate, extract a sample proportional to the changing exhaust flow rate. We consider the following to be examples of changing flows that require proportional sampling: Raw exhaust, exhaust diluted with a constant flow rate of dilution air, and CVS dilution with a CVS flow meter that does not have an upstream heat exchanger or electronic flow control. Integrate the flow rate over a test interval to determine the total flow from which you extracted the proportional sample. Multiply the mean concentration of the batch sample by the total flow from which the sample was

extracted. If the total emission is a molar quantity, convert this quantity to a mass by multiplying it by its molar mass, *M.* The result is the mass of the emission, *m.* In the case of PM emissions, where the mean PM concentration is already in units of mass per mole of sample, $\bar{M}_{PM}$, simply multiply it by the total flow. The result is the total mass of PM, m_{PM}. Calculate *m* for batch sampling with variable flow using the following equation:

$$m = M \cdot \overline{x} \cdot \sum_{i=1}^{N} \dot{n}_i \cdot \Delta t$$

Eq. 1065.650-6

Example:

M_{NOx} = 46.0055 g/mol
N = 9000
$\bar{x}_{NOx}$ = 85.6 μmol/mol = 85.6· 10^{-6} mol/mol
$\dot{n}_{dexh1}$ = 25.534 mol/s
$\dot{n}_{dexh2}$ = 26.950 mol/s
f_{record} = 5 Hz

Using Eq. 1065.650–5,

Δt= 1/5 = 0.2
m_{NOx} = 46.0055·85.6·10^{-6}·(25.534 + 26.950 + ... + $\dot{n}_{exh9000}$)·0.2
m_{NOx} = 4.201 g

(ii) *Constant flow rate.* If you batch sample from a constant exhaust flow rate, extract a sample at a proportional or constant flow rate. We consider the following to be examples of constant exhaust flows: CVS diluted exhaust with a CVS flow meter that has either an upstream heat exchanger, electronic flow control, or both. Determine the mean molar flow rate from which you extracted the constant flow rate sample. Multiply the mean concentration of the batch sample by the mean molar flow rate of the exhaust from which the sample was extracted, and multiply the result by the time of the test interval. If the total emission is a molar quantity, convert this quantity to a mass by multiplying it by its molar mass, *M.* The result is the mass of the emission, *m.* In the case of PM emissions, where the mean PM concentration is already in units of mass per mole of sample, $\bar{M}_{PM.}$, simply multiply it by the total flow, and the result is the total mass of PM, m_{PM}. Calculate *m* for sampling with constant flow using the following equations:

$$m = M \cdot \overline{x} \cdot \overline{\dot{n}} \cdot \Delta t$$

Eq. 1065.650-7

and for PM or any other analysis of a batch sample that yields a mass per mole of sample,

$$\overline{M} = M \cdot \overline{x}$$

Eq. 1065.650-8

Example:

$\bar{M}_{PM}$ = 144.0 μg/mol = 144.0·10^{-6} g/mol
$\overline{\dot{n}}_{dexh}$ = 57.692 mol/s
Δt = 1200 s
m_{PM} = 144.0·10^{-6}·57.692·1200
m_{PM} = 9.9692 g

* * * * *

(d) *Total work over a test interval.* To calculate the total work from the engine over a test interval, add the total work from all the work paths described in § 1065.210 that cross the system boundary including electrical energy/work, mechanical shaft work, and fluid pumping work. For all work paths, except the engine's primary output shaft (crankshaft), the total work for the path over the test interval is the integration of the net work flow rate (power) out of the system boundary. When energy/work flows into the system boundary, this work flow rate signal becomes negative; in this case, include these negative work rate values in the integration to calculate total work from that work path. Some work paths may result in a negative total work. Include negative total work values from any work path in the calculated total work from the engine rather than setting the values to zero. The rest of this paragraph (d) describes how to calculate total work from the engine's primary output shaft over a test interval. Before integrating power on the engine's primary output shaft, adjust the speed and torque data for the time alignment used in § 1065.514(c). Any advance or delay used on the feedback signals for cycle validation must also be used for calculating work. Account for work of accessories according to § 1065.110. Exclude any work during cranking and starting. Exclude work during actual motoring operation (negative feedback torques), unless the engine was connected to one or more energy storage devices. Examples of such energy storage devices include hybrid powertrain batteries and hydraulic accumulators, like the ones illustrated in Figure 1 of § 1065.210. Exclude any work during reference zero-load idle periods (0% speed or idle speed with 0 N·m reference torque). Note, that there must be two consecutive reference zero load idle points to establish a period where this applies. Include work during idle points with simulated minimum torque such as Curb Idle Transmissions Torque (CITT) for automatic transmissions in ''drive''. The work calculation method described in paragraphs (d)(1) though (7) of this section meets these requirements using rectangular integration. You may use other logic that gives equivalent results. For example, you may use a trapezoidal integration method as described in paragraph (d)(8) of this section.

* * * * *

(7) Integrate the resulting values for power over the test interval. Calculate total work as follows:

$$W = \sum_{i=1}^{N} P_i \cdot \Delta t$$

Eq. 1065.650-10

Where:

W = total work from the primary output shaft

P_i = instantaneous power from the primary output shaft over an interval i.

$$P_i = f_{ni} \cdot T_i$$

Eq. 1065.650-11

Example:

N = 9000

f_{n1} = 1800.2 r/min

f_{n2} = 1805.8 r/min

T_1 = 177.23 N·m

T_2 = 175.00 N·m

C_{rev} = 2·π rad/r

C_{t1} = 60 s/min

C_p = 1000 (N·m·rad/s)/kW

f_{record} = 5 Hz

C_{t2} = 3600 s/hr

$$P_1 = \frac{1800.2 \cdot 177.23 \cdot 2 \cdot 3.14159}{60 \cdot 1000}$$

P_1 = 33.41 kW

P_2 = 33.09 kW

Using Eq. 1065.650–5, Δt = 1/5 = 0.2 s

$$W = \frac{(33.41 + 33.09 + \ldots + P_{9000}) \cdot 0.2}{3600}$$

W = 16.875 kW·hr

* * * * *

(f) * * *

(2) *Total work.* To calculate a value proportional to total work over a test interval, integrate a value that is proportional to power. Use information about the brake-specific fuel consumption of your engine, e_{fuel}, to convert a signal proportional to fuel flow rate to a signal proportional to power. To determine a signal proportional to fuel flow rate, divide a signal that is proportional to the mass rate of carbon products by the fraction of carbon in your fuel, w_C. You may use a measured w_C or you may use default values for a given fuel as described in § 1065.655(e). Calculate the mass rate of carbon from the amount of carbon and water in the exhaust, which you determine with a chemical balance of fuel, DEF, intake air, and exhaust as described in § 1065.655. In the chemical balance, you must use concentrations from the flow that generated the signal proportional to molar flow rate, $\dot{n}$, in paragraph (e)(1) of this section. Calculate a value proportional to total work as follows:

$$W = \sum_{i=1}^{N} \tilde{P}_i \cdot \Delta t$$

Eq. 1065.650-15

Where:

$$\tilde{P}_i = \frac{\tilde{\dot{m}}_{fuel\,i}}{e_{fuel}}$$

Eq. 1065.650-16

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(g) *Brake-specific emissions over a duty cycle with multiple test intervals.* The standard-setting part may specify a duty cycle with multiple test intervals, such as with discrete-mode steady-state testing. Unless we specify otherwise, calculate composite brake-specific emissions over the duty cycle as described in this paragraph (g). If a measured mass (or mass rate) is negative, set it to zero for calculating composite brake-specific emissions, but leave it unchanged for drift validation. In the case of calculating composite brake-specific emissions relative to a combined emission standard (such as a NO_X + NMHC standard), change any negative mass (or mass rate) values to zero for a particular pollutant before combining the values for the different pollutants.

(1) Use the following equation to calculate composite brake-specific emissions for duty cycles with multiple test intervals all with prescribed durations, such as cold-start and hot-start transient cycles:

$$e_{comp} = \frac{\sum_{i=1}^{N} WF_i \cdot m_i}{\sum_{i=1}^{N} WF_i \cdot W_i}$$

Eq. 1065.650-17

Where:

i = test interval number.

N = number of test intervals.

WF = weighting factor for the test interval as defined in the standard-setting part.

m = mass of emissions over the test interval as determined in paragraph (c) of this section.

W = total work from the engine over the test interval as determined in paragraph (d) of this section.

Example:

N = 2

WF_1 = 0.1428

WF_2 = 0.8572

m_1 = 70.125 g

m_2 = 64.975 g

W_1 = 25.783 kW·hr

W_2 = 25.783 kW·hr

$$e_{NO_x comp} = \frac{(0.1428 \cdot 70.125) + (0.8572 \cdot 64.975)}{(0.1428 \cdot 25.783) + (0.8572 \cdot 25.783)}$$

$e_{NOxcomp}$ = 2.548 g/kW·hr

(2) Calculate composite brake-specific emissions for duty cycles with multiple test intervals that allow use of varying duration, such as discrete-mode steady-state duty cycles, as follows:

(i) Use the following equation if you calculate brake-specific emissions over test intervals based on total mass and total work as described in paragraph (b)(1) of this section:

$$e_{comp} = \frac{\sum_{i=1}^{N} WF_i \cdot \frac{m_i}{t_i}}{\sum_{i=1}^{N} WF_i \cdot \frac{W_i}{t_i}}$$

Eq. 1065.650-18

Where:

i = test interval number.

N = number of test intervals.

WF = weighting factor for the test interval as defined in the standard-setting part.

m = mass of emissions over the test interval as determined in paragraph (c) of this section.

W = total work from the engine over the test interval as determined in paragraph (d) of this section.

t = duration of the test interval.

Example:

N = 2

WF_1 = 0.85

WF_2 = 0.15

m_1 = 1.3753 g

m_2 = 0.4135 g

t_1 = 120 s

t_2 = 200 s

W_1 = 2.8375 kW·hr W_2 = 0.0 kW·hr

$$e_{NO_x comp} = \frac{\left(0.85 \cdot \frac{1.3753}{120}\right) + \left(0.15 \cdot \frac{0.4135}{200}\right)}{\left(0.85 \cdot \frac{2.8375}{120}\right) + \left(0.15 \cdot \frac{0.0}{200}\right)}$$

$e_{NOxcomp}$ = 0.5001 g/kW·hr

(ii) Use the following equation if you calculate brake-specific emissions over test intervals based on the ratio of mass rate to power as described in paragraph (b)(2) of this section:

$$e_{comp} = \frac{\sum_{i=1}^{N} WF_i \cdot \overline{\dot{m}}_i}{\sum_{i=1}^{N} WF_i \cdot \overline{P}_i}$$

Eq. 1065.650-19

Where:

i = test interval number.

N = number of test intervals.

WF = weighting factor for the test interval as defined in the standard-setting part.

$\overline{\dot{m}}$ = mean steady-state mass rate of emissions over the test interval as determined in paragraph (e) of this section.

$\bar{P}$ = mean steady-state power over the test interval as described in paragraph (e) of this section.

Example:

N = 2
WF_1 = 0.85
WF_2 = 0.15
$\overline{\dot{m}}_1$ = 2.25842 g/hr
$\overline{\dot{m}}_2$ = 0.063443 g/hr
$\bar{P}_1$ = 4.5383 kW
$\bar{P}_2$ = 0.0 kW

$$e_{NO_x comp} = \frac{(0.85 \cdot 2.25842) + (0.15 \cdot 0.063443)}{(0.85 \cdot 4.5383) + (0.15 \cdot 0.0)}$$

$e_{NOxcomp}$ = 0.5001 g/kW·hr

* * * * *

■ 345. Amend § 1065.655 by:

■ a. Revising the section heading and paragraphs (c)(3), (e)(1)(i), (e)(4);

■ b. Amending paragraph (e)(4) by removing Table 1;

■ c. Adding paragraph (e)(5); and

■ d. Revising paragraphs (f)(3) and (g)(1).

The revisions and additions read as follows:

§ 1065.655 Chemical balances of fuel, DEF, intake air, and exhaust.

* * * * *

(c) * * *

(3) Use the following symbols and subscripts in the equations for performing the chemical balance calculations in this paragraph (c):

$x_{dil/exh}$ = amount of dilution gas or excess air per mole of exhaust.

x_{H2Oexh} = amount of H_2O in exhaust per mole of exhaust.

$x_{Ccombdry}$ = amount of carbon from fuel and injected fluid in the exhaust per mole of dry exhaust.

x_{H2dry} = amount of H_2 in exhaust per amount of dry exhaust.

K_{H2Ogas} = water-gas reaction equilibrium coefficient. You may use 3.5 or calculate your own value using good engineering judgment.

$x_{H2Oexhdry}$ = amount of H_2O in exhaust per dry mole of dry exhaust.

$x_{prod/intdry}$ = amount of dry stoichiometric products per dry mole of intake air.

$x_{dil/exhdry}$ = amount of dilution gas and/or excess air per mole of dry exhaust.

$x_{int/exhdry}$ = amount of intake air required to produce actual combustion products per mole of dry (raw or diluted) exhaust.

$x_{raw/exhdry}$ = amount of undiluted exhaust, without excess air, per mole of dry (raw or diluted) exhaust.

x_{O2int} = amount of intake air O_2 per mole of intake air.

$x_{CO2intdry}$ = amount of intake air CO_2 per mole of dry intake air. You may use $x_{CO2intdry}$ = 375 μmol/mol, but we recommend measuring the actual concentration in the intake air.

$x_{H2Ointdry}$ = amount of intake air H_2O per mole of dry intake air.

x_{CO2int} = amount of intake air CO_2 per mole of intake air.

x_{CO2dil} = amount of dilution gas CO_2 per mole of dilution gas.

$x_{CO2dildry}$ = amount of dilution gas CO_2 per mole of dry dilution gas. If you use air as diluent, you may use $x_{CO2dildry}$ = 375 μmol/mol, but we recommend measuring the actual concentration in the intake air.

$x_{H2Odildry}$ = amount of dilution gas H_2O per mole of dry dilution gas.

x_{H2Odil} = amount of dilution gas H_2O per mole of dilution gas.

$x_{[emission]meas}$ = amount of measured emission in the sample at the respective gas analyzer.

$x_{[emission]dry}$ = amount of emission per dry mole of dry sample.

$x_{H2O[emission]meas}$ = amount of H_2O in sample at emission-detection location. Measure or estimate these values according to § 1065.145(e)(2).

x_{H2Oint} = amount of H_2O in the intake air, based on a humidity measurement of intake air.

α = atomic hydrogen-to-carbon ratio of the fuel (or mixture of test fuels) and any injected fluids.

β = atomic oxygen-to-carbon ratio of the fuel (or mixture of test fuels) and any injected fluids.

γ = atomic sulfur-to-carbon ratio of the fuel (or mixture of test fuels) and any injected fluids.

δ = atomic nitrogen-to-carbon ratio of the fuel (or mixture of test fuels) and any injected fluids.

* * * * *

(e) * * *

(1) * * *

(i) Determine the carbon and hydrogen mass fractions according to ASTM D5291 (incorporated by reference in § 1065.1010). When using ASTM D5291 to determine carbon and hydrogen mass fractions of gasoline (with or without blended ethanol), use good engineering judgment to adapt the method as appropriate. This may include consulting with the instrument

manufacturer on how to test high-volatility fuels. Allow the weight of volatile fuel samples to stabilize for 20 minutes before starting the analysis; if the weight still drifts after 20 minutes, prepare a new sample). Retest the sample if the carbon, hydrogen, oxygen, sulfur, and nitrogen mass fractions do not add up to a total mass of 100 ± 0.5%; if you do not measure oxygen, you may assume it has a zero concentration for this specification. You may also assume that sulfur and nitrogen have a zero concentration for all fuels except residual fuel blends.

* * * * *

(4) Calculate α, β, γ, and δ using the following equations:

$$\alpha = \frac{M_C}{M_H} \cdot \frac{\sum_{j=1}^{M} \dot{m}_j \cdot w_{Hj}}{\sum_{j=1}^{M} \dot{m}_j \cdot w_{Cj}}$$

Eq. 1065.655-20

$$\beta = \frac{M_C}{M_O} \cdot \frac{\sum_{j=1}^{M} \dot{m}_j \cdot w_{Oj}}{\sum_{j=1}^{M} \dot{m}_j \cdot w_{Cj}}$$

Eq. 1065.655-21

$$\gamma = \frac{M_C}{M_S} \cdot \frac{\sum_{j=1}^{M} \dot{m}_j \cdot w_{Sj}}{\sum_{j=1}^{M} \dot{m}_j \cdot w_{Cj}}$$

Eq. 1065.655-22

$$\delta = \frac{M_C}{M_N} \cdot \frac{\sum_{j=1}^{M} \dot{m}_j \cdot w_{Nj}}{\sum_{j=1}^{M} \dot{m}_j \cdot w_{Cj}}$$

Eq. 1065.655-23

Where:

M = total number of fuels and injected fluids over the duty cycle.

j = an indexing variable that represents one fuel or injected fluid, starting with $j = 1$.

$\dot{m}_j$ = the mass flow rate of the fuel or any injected fluid j. For applications using a single fuel and no DEF fluid, set this value to 1. For batch measurements, divide the total mass of fuel over the test interval duration to determine a mass rate.

w_{Hj} = hydrogen mass fraction of fuel or any injected fluid j.

w_{Cj} = carbon mass fraction of fuel or any injected fluid j.

w_{Oj} = oxygen mass fraction of fuel or any injected fluid j.

w_{Sj} = sulfur mass fraction of fuel or any injected fluid j.

w_{Nj} = nitrogen mass fraction of fuel or any injected fluid j.

Example:

$N = 1$
$j = 1$
$\dot{m}_j = 1$
$w_{Hj} = 0.1239$
$w_{Cj} = 0.8206$
$w_{Oj} = 0.0547$
$w_{Sj} = 0.00066$
$w_{Nj} = 0.000095$
$M_C = 12.0107$
$M_H = 1.00794$
$M_O = 15.9994$
$M_S = 32.065$
$M_N = 14.0067$

$$\alpha = \frac{12.0107 \cdot 1 \cdot 0.1239}{1.00794 \cdot 1 \cdot 0.8206}$$

$$\beta = \frac{12.0107 \cdot 1 \cdot 0.0547}{15.9994 \cdot 1 \cdot 0.8206}$$

$$\gamma = \frac{12.0107 \cdot 1 \cdot 0.00066}{32.065 \cdot 1 \cdot 0.8206}$$

$$\delta = \frac{12.0107 \cdot 1 \cdot 0.000095}{14.0067 \cdot 1 \cdot 0.8206}$$

$\alpha = 1.799$
$\beta = 0.05004$
$\gamma = 0.0003012$
$\delta = 0.0001003$

(5) Table 1 follows:

TABLE 1 OF § 1065.655—DEFAULT VALUES OF α, β, γ, δ, AND w_C

Fuel or injected fluid	Atomic hydrogen, oxygen, sulfur, and nitrogen-to-carbon ratios $CH\alpha O\beta S\gamma N\delta$	Carbon mass fraction, w_C g/g
Gasoline	$CH_{1.85}O_0S_0N_0$	0.866
E10 Gasoline	$CH_{1.92}O_{0.03}S_0N_0$	0.833
E15 Gasoline	$CH_{1.95}O_{0.05}S_0N_0$	0.817
E85 Gasoline	$CH_{2.73}O_{0.38}S_0N_0$	0.576

TABLE 1 OF § 1065.655—DEFAULT VALUES OF α, β, γ, δ, AND w_C—Continued

Fuel or injected fluid	Atomic hydrogen, oxygen, sulfur, and nitrogen-to-carbon ratios $CH\alpha O\beta S\gamma N\delta$	Carbon mass fraction, w_C g/g
E100 Ethanol	$CH_3O_{0.5}S_0N_0$	0.521
M100 Methanol	$CH_4O_1S_0N_0$	0.375
#1 Diesel	$CH_{1.93}O_0S_0N_0$	0.861
#2 Diesel	$CH_{1.80}O_0S_0N_0$	0.869
Liquefied petroleum gas	$CH_{2.64}O_0S_0N_0$	0.819
Natural gas	$CH_{3.78}\ O_{0.016}S_0N_0$	0.747
Residual fuel blends	Must be determined by measured fuel properties as described in paragraph (e)(1) of this section.	
Diesel exhaust fluid	$CH_{17.85}O_{7.92}S_0N_2$	0.065

(f) * * *

(3) *Fluid mass flow rate calculation.* This calculation may be used only for steady-state laboratory testing. You may not use this calculation if the standard-setting part requires carbon balance error verification as described in § 1065.543. See § 1065.915(d)(5)(iv) for application to field testing. Calculate $\dot{n}_{exh}$ based on $\dot{m}_j$ using the following equation:

$$\dot{n}_{exh} = \sum_{j=1}^{N} \dot{m}_j \cdot \frac{w_C \cdot \left(1 + x_{H2Oexhdry}\right)}{M_C \cdot x_{Ccombdry}}$$

Eq. 1065.655-25

Where:

$\dot{n}_{exh}$ = raw exhaust molar flow rate from which you measured emissions.

N = total number of fuels and injected fluids over the duty cycle.

j = an indexing variable that represents one fuel or injected fluid, starting with $j = 1$.

$\dot{m}_j$ = the mass flow rate of the fuel or any injected fluid j.

Example:

$N = 1$

$j = 1$

$\dot{m}_j = 7.559$ g/s

$w_C = 0.869$ g/g

$M_C = 12.0107$ g/mol

$x_{Ccombdry} = 99.87$ mmol/mol = 0.09987 mol/mol

$x_{H20exhdry} = 107.64$ mmol/mol = 0.10764 mol/mol

$$\dot{n}_{exh} = 7.559 \cdot \frac{0.869 \cdot \left(1 + 0.10764\right)}{12.0107 \cdot 0.09987}$$

$\dot{n}_{exh} = 6.066$ mol/s

(g) * * *

(1) *Crankcase flow rate.* If engines are not subject to crankcase controls under the standard-setting part, calculate raw exhaust flow as described in paragraph (f)(1) of this section.

* * * * *

■ 346. Amend § 1065.659 by revising paragraphs (c)(2) and (3) to read as follows:

§ 1065.659 Removed water correction.

* * * * *

(c) * * *

(2) If the measurement comes from raw exhaust, you may determine the amount of water based on intake-air humidity, plus a chemical balance of fuel, DEF, intake air, and exhaust as described in § 1065.655.

(3) If the measurement comes from diluted exhaust, you may determine the amount of water based on intake-air humidity, dilution air humidity, and a chemical balance of fuel, DEF, intake air, and exhaust as described in § 1065.655.

* * * * *

■ 347. Amend § 1065.660 by revising paragraphs (b)(4) and (c)(2) to read as follows:

§ 1065.660 THC, NMHC, NMNEHC, CH_4, and C_2H_6 determination.

* * * * *

(b) * * *

(4) For an FTIR, calculate x_{NMHC} by summing the hydrocarbon species listed in § 1065.266(c) as follows:

$$x_{NMHC} = \sum_{i=1}^{N} \left(x_{HCi} - x_{HCi\text{-}init}\right)$$

Eq. 1065.660-6

Where:

x_{NMHC} = concentration of NMHC.

x_{HCi} = the C_1-equivalent concentration of hydrocarbon species i as measured by the FTIR, not corrected for initial contamination.

$x_{HCi\text{-}init}$ = the C_1-equivalent concentration of the initial system contamination (optional) of hydrocarbon species i, dry-to-wet corrected, as measured by the FTIR.

Example:

x_{C2H6} = 4.9 μmol/mol
x_{C2H4} = 0.9 μmol/mol
x_{C2H2} = 0.8 μmol/mol
x_{C3H8} = 0.4 μmol/mol
x_{C3H6} = 0.5 μmol/mol
x_{C4H10} = 0.3 μmol/mol
x_{CH2O} = 0.8 μmol/mol
x_{C2H4O} = 0.3 μmol/mol
x_{CH2O2} = 0.1 μmol/mol
x_{CH4O} = 0.1 μmol/mol
x_{NMHC} = 4.9 + 0.9 + 0.8 + 0.4 + 0.5 + 0.3 + 0.8 + 0.3 + 0.1 + 0.1
x_{NMHC} = 9.1 μmol/mol

(c) * * *

(2) For a GC–FID, NMC FID, or FTIR, calculate x_{NMNEHC} using the THC analyzer's response factors (*RF*) for CH_4 and C_2H_6, from § 1065.360, and the initial contamination and dry-to-wet corrected THC concentration $x_{THC[THC-FID]cor}$ as determined in paragraph (a) of this section as follows:

$$x_{NMNEHC} = x_{THC[THC-FID]cor} - RF_{CH4[THC-FID]} \cdot x_{CH4} - RF_{C2H6[THC-FID]} \cdot x_{C2H6}$$

Eq. 1065.660-7

Where:

x_{NMNEHC} = concentration of NMNEHC.
$x_{THC[THC-FID]cor}$ = concentration of THC, initial THC contamination and dry-to-wet corrected, as measured by the THC FID.
$RF_{CH4[THC-FID]}$ = response factor of THC-FID to CH_4.
x_{CH4} = concentration of CH_4, dry-to-wet corrected, as measured by the GC-FID, NMC FID, or FTIR.
$RF_{C2H6[THC-FID]}$ = response factor of THC-FID to C_2H_6.
x_{C2H6} = the C_1-equivalent concentration of C_2H_6, dry-to-wet corrected, as measured by the GC-FID or FTIR.

Example:

$x_{THC[THC-FID]cor}$ = 145.6 μmol/mol
$RF_{CH4[THC-FID]}$ = 0.970
x_{CH4} = 18.9 μmol/mol
$RF_{C2H6[THC-FID]}$ = 1.02
x_{C2H6} = 10.6 μmol/mol
x_{NMHC} = 145.6—0.970·18.9—1.02·10.6
x_{NMHC} = 116.5 μmol/mol

* * * * *

■ 348. Amend § 1065.665 by revising paragraph (a) to read as follows:

§ 1065.665 THCE and NMHCE determination.

(a) If you measured an oxygenated hydrocarbon's mass concentration, first calculate its molar concentration in the exhaust sample stream from which the sample was taken (raw or diluted exhaust), and convert this into a C_1-equivalent molar concentration. Add these C_1-equivalent molar concentrations to the molar concentration of non-oxygenated total hydrocarbon (NOTHC). The result is the molar concentration of total hydrocarbon equivalent (THCE). Calculate THCE concentration using the following equations, noting that Eq. 1065.665–3 is required only if you need to convert your oxygenated hydrocarbon (OHC) concentration from mass to moles:

$$x_{THCE} = x_{NOTHC} + \sum_{i=1}^{N} \left(x_{OHCi} - x_{OHCi\text{-init}} \right)$$

Eq. 1065.665-1

$$x_{NOTHC} = x_{THC[THC-FID]cor} - \sum_{i=1}^{N} \left(\left(x_{OHCi} - x_{OHCi\text{-init}} \right) \cdot RF_{OHCi[THC-FID]} \right)$$

Eq. 1065.665-2

$$x_{OHCi} = \frac{\dfrac{m_{dexhOHCi}}{M_{OHCi}}}{\dfrac{m_{dexh}}{M_{dexh}}} = \frac{n_{dexhOHCi}}{n_{dexh}}$$

Eq. 1065.665-3

Where:

x_{THCE} = the sum of the C_1-equivalent concentrations of non-oxygenated hydrocarbon, alcohols, and aldehydes.
x_{NOTHC} = the sum of the C_1-equivalent concentrations of NOTHC.
x_{OHCi} = the C_1-equivalent concentration of oxygenated species *i* in diluted exhaust, not corrected for initial contamination.
$x_{OHCi\text{-init}}$ = the C_1-equivalent concentration of the initial system contamination (optional) of oxygenated species *i*, dry-to-wet corrected.
$x_{THC[THC-FID]cor}$ = the C_1-equivalent response to NOTHC and all OHC in diluted exhaust, HC contamination and dry-to-wet corrected, as measured by the THC-FID.
$RF_{OHCi[THC-FID]}$ = the response factor of the FID to species *i* relative to propane on a C_1-equivalent basis.
M_{dexh} = the molar mass of diluted exhaust as determine in § 1065.340.
$m_{dexhOHCi}$ = the mass of oxygenated species *i* in dilute exhaust.
M_{OHCi} = the C_1-equivalent molecular weight of oxygenated species *i*.

m_{dexh} = the mass of diluted exhaust.
$n_{dexhOHCi}$ = the number of moles of oxygenated species i in total diluted exhaust flow.
n_{dexh} = the total diluted exhaust flow.

* * * * *

■ 349. Amend § 1065.667 by revising paragraph (d) to read as follows:

§ 1065.667 Dilution air background emission correction.

* * * * *

(d) You may determine the total flow of dilution air from the measured dilute exhaust flow and a chemical balance of the fuel, DEF, intake air, and dilute exhaust as described in § 1065.655. For this option, the molar flow of dilution air is calculated by multiplying the dilute exhaust flow by the mole fraction of dilution gas to dilute exhaust, $x_{dil/exh}$, from the dilute chemical balance. This may be done by totaling continuous calculations or by using batch results. For example, to use batch results, the total flow of dilution air is calculated by multiplying the total flow of diluted exhaust, n_{dexh}, by the flow-weighted mean mole fraction of dilution air in diluted exhaust, $\bar{x}_{dil/exh}$. Calculate $\bar{x}_{dil/exh}$ using flow-weighted mean concentrations of emissions in the chemical balance, as described in § 1065.655. The chemical balance in § 1065.655 assumes that your engine operates stoichiometrically, even if it is a lean-burn engine, such as a compression-ignition engine. Note that for lean-burn engines this assumption could result in an error in emission calculations. This error could occur because the chemical balance in § 1065.655 treats excess air passing through a lean-burn engine as if it was dilution air. If an emission concentration expected at the standard is about 100 times its dilution air background concentration, this error is negligible. However, if an emission concentration expected at the standard is similar to its background concentration, this error could be significant. If this error might affect your ability to show that your engines comply with applicable standards, we recommend that you either determine the total flow of dilution air using one of the more accurate methods in paragraph (b) or (c) of this section, or remove background emissions from dilution air by HEPA filtration, chemical adsorption, or catalytic scrubbing. You might also consider using a partial-flow dilution technique such as a bag mini-diluter, which uses purified air as the dilution air.

* * * * *

■ 350. Amend § 1065.695 by adding paragraph (c)(8)(v) to read as follows:

§ 1065.695 Data requirements.

* * * * *

(c) * * *

(8) * * *

(v) Carbon balance error verification, if performed.

* * * * *

■ 351. Amend § 1065.701 by revising paragraphs (b) and (f) to read as follows:

§ 1065.701 General requirements for test fuels.

* * * * *

(b) *Fuels meeting alternate specifications.* We may allow you to use a different test fuel (such as California LEV III gasoline) if it does not affect your ability to show that your engines would comply with all applicable emission standards using the specified test fuel.

* * * * *

(f) *Service accumulation and field testing fuels.* If we do not specify a service-accumulation or field-testing fuel in the standard-setting part, use an appropriate commercially available fuel such as those meeting minimum specifications from the following table:

TABLE 1 OF § 1065.701—EXAMPLES OF SERVICE-ACCUMULATION AND FIELD-TESTING FUELS

Fuel category	Subcategory	Reference procedure[a]
Diesel	Light distillate and light blends with residual	ASTM D975
	Middle distillate	ASTM D6985
	Biodiesel (B100)	ASTM D6751
Intermediate and residual fuel	All	See § 1065.705
Gasoline	Automotive gasoline	ASTM D4814
	Automotive gasoline with ethanol concentration up to 10 volume %.	ASTM D4814
Alcohol	Ethanol (E51-83)	ASTM D5798
	Methanol (M70-M85)	ASTM D5797
Aviation fuel	Aviation gasoline	ASTM D910
	Gas turbine	ASTM D1655
	Jet B wide cut	ASTM D6615
Gas turbine fuel	General	ASTM D2880

[a]Incorporated by reference, see § 1065.1010.

■ 352. Amend § 1065.703 by revising paragraph (b) to read as follows:

§ 1065.703 Distillate diesel fuel.

* * * * *

(b) There are three grades of #2 diesel fuel specified for use as a test fuel. See the standard-setting part to determine which grade to use. If the standard-setting part does not specify which grade to use, use good engineering judgment to select the grade that represents the fuel on which the engines will operate in use. The three grades are specified in the following table:

TABLE 1 OF § 1065.703–TEST FUEL SPECIFICATIONS FOR DISTILLATE DIESEL FUEL

Property	Unit	Ultra Low Sulfur	Low Sulfur	High Sulfur	Reference Procedure[a]
Cetane Number	—	40-50	40-50	40-50	ASTM D613
Distillation range:	°C				ASTM D86
Initial boiling point		171-204	171-204	171-204	
10 pct. point		204-238	204-238	204-238	
50 pct. point		243-282	243-282	243-282	
90 pct. point		293-332	293-332	293-332	
Endpoint		321-366	321-366	321-366	
Gravity	°API	32-37	32-37	32-37	ASTM D4052
Total sulfur, ultra low sulfur	mg/kg	7-15			See 40 CFR 80.580
Total sulfur, low and high sulfur	mg/kg		300-500	800-2500	ASTM D2622 or alternates as allowed under 40 CFR 80.580
Aromatics, min. (Remainder shall be paraffins, naphthenes, and olefins)	g/kg	100	100	100	ASTM D5186
Flashpoint, min.	°C	54	54	54	ASTM D93
Kinematic Viscosity	mm^2/s	2.0-3.2	2.0-3.2	2.0-3.2	ASTM D445

[a]Incorporated by reference, see § 1065.1010. See § 1065.701(d) for other allowed procedures.

* * * * *

■ 353. Amend § 1065.705 by revising paragraph (c) to read as follows:

§ 1065.705 Residual and intermediate residual fuel.

* * * * *

(c) The fuel must meet the specifications for one of the categories in the following table:

BILLING CODE 6560–50–P

TABLE 1 OF § 1065.705–SERVICE ACCUMULATION AND TEST FUEL SPECIFICATIONS FOR RESIDUAL FUEL

Property	Unit	Category ISO-F-										Reference Procedure[a]
		RMA 30	RMB 30	RMD 80	RME 180	RMF 180	RMG 380	RMH 380	RMK 380	RMH 700	RMK 700	
Density at 15 °C, max.	kg/m^3	960.0	975.0	980.0	991.0		991.0		1010.0	991.0	1010.0	ISO 3675 or ISO 12185 (see also ISO 8217)
Kinematic viscosity at 50 °C, max.	mm^2/s	30.0		80.0	180.0		380.0		700.0			ISO 3104
Flash point, min.	°C	60		60	60		60		60			ISO 2719 (see also ISO 8217)
Pour point (upper) Winter quality, max. Summer quality, max.	°C	 0 6	 24 24	 30 30	 30 30		 30 30		 30 30			ISO 3016
Carbon residue, max.	(kg/kg) %	10		14	15	20	18	22	22			ISO 10370
Ash, max.	(kg/kg) %	0.10		0.10	0.10	0.15	0.15		0.15			ISO 6245
Water, max.	(m^3/m^3) %	0.5		0.5	0.5		0.5		0.5			ISO 3733
Sulfur, max.	(kg/kg) %	3.50		4.00	4.50		4.50		4.50			ISO 8754 or ISO 14596 (see also ISO 8217)
Vanadium, max.	mg/kg	150		350	200	500	300	600	600			ISO 14597 or IP-501 or IP-470 (see also ISO 8217)
Total sediment potential, max.	(kg/kg) %	0.10		0.10	0.10		0.10		0.10			ISO 10307-2 (see also ISO 8217)
Aluminium plus silicon, max.	mg/kg	80		80	80		80		80			ISO 10478 or IP 501 or IP 470 (see also ISO 8217

[a]Incorporated by reference, see § 1065.1010. See § 1065.701(d) for other allowed procedures.

BILLING CODE 6560–50–C

■ 354. Amend § 1065.710 by revising paragraphs (b)(2) and (c) to read as follows:

§ 1065.710 Gasoline.

* * * * *

(b) * * *

(2) Table 1 of this section identifies limit values consistent with the units in the reference procedure for each fuel property. These values are generally specified in international units. Values presented in parentheses are for information only. Table 1 follows:

BILLING CODE 6560–50–P

TABLE 1 OF § 1065.710–TEST FUEL SPECIFICATIONS FOR A LOW-LEVEL ETHANOL-GASOLINE BLEND

Property	Unit	SPECIFICATION			Reference Procedure[a]
		General Testing	Low-Temperature Testing	High Altitude Testing	
Antiknock Index (R+M)/2	-	87.0-88.4[b]		Minimum, 87.0	ASTM D2699 and ASTM D2700
Sensitivity (R-M)	-	Minimum, 7.5			ASTM D2699 and ASTM D2700
Dry Vapor Pressure Equivalent (*DVPE*)[c,d]	kPa (psi)	60.0-63.4 (8.7-9.2)	77.2-81.4 (11.2-11.8)	52.4-55.2 (7.6-8.0)	ASTM D5191
Distillation[d] 10 % evaporated	°C (°F)	49-60 (120-140)	43-54 (110-130)	49-60 (120-140)	ASTM D86
50 % evaporated	°C (°F)	88-99 (190-210)			
90 % evaporated	°C (°F)	157-168 (315-335)			
Evaporated final boiling point	°C (°F)	193-216 (380-420)			
Residue	milliliter	Maximum, 2.0			
Total Aromatic Hydrocarbons	volume %	21.0-25.0			ASTM D5769
C6 Aromatics (benzene)	volume %	0.5-0.7			
C7 Aromatics (toluene)	volume %	5.2-6.4			
C8 Aromatics	volume %	5.2-6.4			
C9 Aromatics	volume %	5.2-6.4			
C10+ Aromatics	volume %	4.4-5.6			
Olefins[e]	volume %	4.0-10.0			ASTM D6550
Ethanol blended	volume %	9.6-10.0			See paragraph (b)(3) of this section.
Ethanol confirmatory[f]	volume %	9.4-10.2			ASTM D4815 or ASTM D5599
Total Content of Oxygenates Other than Ethanol[f]	volume %	Maximum, 0.1			ASTM D4815 or ASTM D5599
Sulfur	mg/kg	8.0-11.0			ASTM D2622, ASTM D5453 or ASTM D7039
Lead	g/liter	Maximum, 0.0026			ASTM D3237
Phosphorus	g/liter	Maximum, 0.0013			ASTM D3231
Copper Corrosion	-	Maximum, No. 1			ASTM D130
Solvent-Washed Gum Content	mg/100 milliliter	Maximum, 3.0			ASTM D381
Oxidation Stability	minute	Minimum, 1000			ASTM D525

[a]Incorporated by reference, see § 1065.1010. See § 1065.701(d) for other allowed procedures.
[b]Octane specifications apply only for testing related to exhaust emissions. For engines or vehicles that require the use of premium fuel, as described in paragraph (d) of this section, the adjusted specification for antiknock index is a minimum value of 91.0; no maximum value applies. All other specifications apply for this high-octane fuel.
[c]Calculate dry vapor pressure equivalent, *DVPE*, based on the measured total vapor pressure, p_T, using the following equation: $DVPE\ (\text{kPa}) = 0.956 \cdot p_T - 2.39$ or $DVPE\ (\text{psi}) = 0.956 \cdot p_T - 0.347$. *DVPE* is intended to be equivalent to Reid Vapor Pressure using a different test method.
[d]Parenthetical values are shown for informational purposes only.
[e]ASTM D6550 prescribes measurement of olefin concentration in mass %. Multiply this result by 0.857 and round to the first decimal place to determine the olefin concentration in volume %.
[f]ASTM D5599 prescribes concentration measurements for ethanol and other oxygenates in mass %. Convert results to volume % as specified in Section 14.3 of ASTM D4815.

* * * * *

(c) The specifications of this paragraph (c) apply for testing with neat gasoline. This is sometimes called indolene or E0 test fuel. Gasoline for testing must have octane values that represent commercially available fuels

for the appropriate application. Test fuel specifications apply as follows:

BILLING CODE 6560–50–C

* * * * *

TABLE 2 OF § 1065.710–TEST FUEL SPECIFICATIONS FOR NEAT (E0) GASOLINE

Property	Unit	SPECIFICATION		Reference Procedure[a]
		General Testing	Low-Temperature Testing	
Distillation Range:				ASTM D86
Evaporated initial boiling point	°C	24-35[b]	24-36	
10 % evaporated	°C	49-57	37-48	
50 % evaporated	°C	93-110	82-101	
90 % evaporated	°C	149-163	158-174	
Evaporated final boiling point	°C	Maximum, 213	Maximum, 212	
Total Aromatic Hydrocarbons	volume %	Maximum, 35	Maximum, 30.4	ASTM D1319 or ASTM D5769
Olefins[c]	volume %	Maximum, 10	Maximum, 17.5	ASTM D1319 or ASTM D6550
Lead	g/liter	Maximum, 0.013	Maximum, 0.013	ASTM D3237
Phosphorous	g/liter	Maximum, 0.0013	Maximum, 0.005	ASTM D3231
Total sulfur	mg/kg	Maximum, 80	Maximum, 80	ASTM D2622
Dry vapor pressure equivalent[d]	kPa	60.0-63.4[b,e]	77.2-81.4	ASTM D5191

[a]Incorporated by reference, see § 1065.1010. See § 1065.701(d) for other allowed procedures.
[b]For testing at altitudes above 1219 m, the specified initial boiling point range is (23.9 to 40.6) °C and the specified volatility range is (52.0 to 55.2) kPa.
[c]ASTM D6550 prescribes measurement of olefin concentration in mass %. Multiply this result by 0.857 and round to the first decimal place to determine the olefin concentration in volume %.
[d]Calculate dry vapor pressure equivalent, *DVPE*, based on the measured total vapor pressure, p_T, in kPa using the following equation: $DVPE$ (kPa) = $0.956 \cdot p_T - 2.39$ or $DVPE$ (psi) = $0.956 \cdot p_T - 0.347$. *DVPE* is intended to be equivalent to Reid Vapor Pressure using a different test method.
[e]For testing unrelated to evaporative emissions, the specified range is (55.2 to 63.4) kPa.

■ 355. Amend § 1065.715 by revising paragraph (a) to read as follows:

§ 1065.715 Natural gas.

(a) Except as specified in paragraph (b) of this section, natural gas for testing must meet the specifications in the following table:

TABLE 1 OF § 1065.715—TEST FUEL SPECIFICATIONS FOR NATURAL GAS

Property	Value[a]
Methane, CH_4	Minimum, 0.87 mol/mol.
Ethane, C_2H_6	Maximum, 0.055 mol/mol.
Propane, C_3H_8	Maximum, 0.012 mol/mol.

TABLE 1 OF § 1065.715—TEST FUEL SPECIFICATIONS FOR NATURAL GAS—Continued

Property	Value[a]
Butane, C_4H_{10}	Maximum, 0.0035 mol/mol.
Pentane, C_5H_{12}	Maximum, 0.0013 mol/mol.
C_6 and higher	Maximum, 0.001 mol/mol.
Oxygen	Maximum, 0.001 mol/mol.
Inert gases (sum of CO_2 and N_2).	Maximum, 0.051 mol/mol.

[a]Demonstrate compliance with fuel specifications based on the reference procedures in ASTM D1945 (incorporated by reference in § 1065.1010), or on other measurement procedures using good engineering judgment. See § 1065.701(d) for other allowed procedures.

* * * * *

■ 356. Amend § 1065.720 by revising paragraph (a) to read as follows:

§ 1065.720 Liquefied petroleum gas.

(a) Except as specified in paragraph (b) of this section, liquefied petroleum gas for testing must meet the specifications in the following table:

TABLE 1 OF § 1065.720—TEST FUEL SPECIFICATIONS FOR LIQUEFIED PETROLEUM GAS

Property	Value	Reference procedure [a]
Propane, C_3H_8	Minimum, 0.85 m^3/m^3	ASTM D2163.
Vapor pressure at 38 °C	Maximum, 1400 kPa	ASTM D1267 or ASTM D2598.[b]
Volatility residue (evaporated temperature, 35 °C)	Maximum, –38 °C	ASTM D1837.
Butanes	Maximum, 0.05 m^3/m^3	ASTM D2163.
Butenes	Maximum, 0.02 m^3/m^3	ASTM D2163.
Pentenes and heavier	Maximum, 0.005 m^3/m^3	ASTM D2163.
Propene	Maximum, 0.1 m^3/m^3	ASTM D2163.
Residual matter (residue on evaporation of 100 ml oil stain observation).	Maximum, 0.05 ml pass [c]	ASTM D2158.
Corrosion, copper strip	Maximum, No. 1	ASTM D1838.
Sulfur	Maximum, 80 mg/kg	ASTM D2784.
Moisture content	pass	ASTM D2713.

[a] Incorporated by reference, see § 1065.1010. See § 1065.701(d) for other allowed procedures.
[b] If these two test methods yield different results, use the results from ASTM D1267.
[c] The test fuel must not yield a persistent oil ring when you add 0.3 ml of solvent residue mixture to a filter paper in 0.1 ml increments and examine it in daylight after two minutes.

* * * * *

■ 357. Amend § 1065.750 by revising paragraph (a)(1)(ii) to read as follows:

§ 1065.750 Analytical gases.

* * * * *

(a) * * *

(1) * * *

(ii) Contamination as specified in the following table:

TABLE 1 OF § 1065.750—GENERAL SPECIFICATIONS FOR PURIFIED GASES [a]

Constituent	Purified air	Purified N_2
THC (C_1-equivalent)	≤0.05 μmol/mol	≤0.05 μmol/mol.
CO	≤1 μmol/mol	≤1 μmol/mol.
CO_2	≤10 μmol/mol	≤10 μmol/mol.
O_2	0.205 to 0.215 mol/mol	≤2 μmol/mol.
NO_X	≤0.02 μmol/mol	≤0.02 μmol/mol.
N_2O [b]	≤0.02 μmol/mol	≤0.02 μmol/mol.

[a] We do not require these levels of purity to be NIST-traceable.
[b] The N_2O limit applies only if the standard-setting part requires you to report N_2O or certify to an N_2O standard.

* * * * *

■ 358. Amend § 1065.790 by revising paragraph (b) to read as follows:

§ 1065.790 Mass standards.

* * * * *

(b) *Dynamometer, fuel mass scale, and DEF mass scale calibration weights.* Use dynamometer and mass scale calibration weights that are certified as NIST-traceable within 0.1% uncertainty. Calibration weights may be certified by any calibration lab that maintains NIST-traceability.

■ 359. Amend § 1065.905 by revising paragraph (f) to read as follows:

§ 1065.905 General provisions.

* * * * *

(f) *Summary.* The following table summarizes the requirements of paragraphs (d) and (e) of this section:

TABLE 1 OF § 1065.905—SUMMARY OF TESTING REQUIREMENTS SPECIFIED OUTSIDE OF THIS SUBPART J

Subpart	Applicability for field testing [a]	Applicability for laboratory or similar testing with PEMS without restriction [a]	Applicability for laboratory or similar testing with PEMS with restrictions [a]
A: Applicability and general provisions.	Use all	Use all	Use all.
B: Equipment for testing	Use § 1065.101 and § 1065.140 through the end of subpart B, except § 1065.140(e)(1) and (4), § 1065.170(c)(1)(vi), and § 1065.195(c). § 1065.910 specifies equipment specific to field testing.	Use all	Use all. § 1065.910 specifies equipment specific to laboratory testing with PEMS.
C: Measurement instruments.	Use all. § 1065.915 allows deviations	Use all except § 1065.295(c).	Use all except § 1065.295(c). § 1065.915 allows deviations.
D: Calibrations and verifications.	Use all except § 1065.308 and § 1065.309. § 1065.920 allows deviations, but also has additional specifications.	Use all	Use all. § 1065.920 allows deviations, but also has additional specifications.
E: Test engine selection, maintenance, and durability.	Do not use. Use standard-setting part	Use all	Use all.

TABLE 1 OF § 1065.905—SUMMARY OF TESTING REQUIREMENTS SPECIFIED OUTSIDE OF THIS SUBPART J—Continued

Subpart	Applicability for field testing [a]	Applicability for laboratory or similar testing with PEMS without restriction [a]	Applicability for laboratory or similar testing with PEMS with restrictions [a]
F: Running an emission test in the laboratory.	Use §§ 1065.590 and 1065.595 for PM. § 1065.930 and § 1065.935 to start and run a field test.	Use all	Use all.
G: Calculations and data requirements.	Use all. § 1065.940 has additional calculation instructions.	Use all	Use all. § 1065.940 has additional calculation instructions.
H: Fuels, engine fluids, analytical gases, and other calibration materials.	Use all	Use all	Use all.
I: Testing with oxygenated fuels.	Use all	Use all	Use all.
K: Definitions and reference materials.	Use all	Use all	Use all.

[a] Refer to paragraphs (d) and (e) of this section for complete specifications.

■ 360. Amend § 1065.915 by revising paragraph (a) to read as follows:

§ 1065.915 PEMS instruments.

(a) *Instrument specifications.* We recommend that you use PEMS that meet the specifications of subpart C of this part. For unrestricted use of PEMS in a laboratory or similar environment, use a PEMS that meets the same specifications as each lab instrument it replaces. For field testing or for testing with PEMS in a laboratory or similar environment, under the provisions of § 1065.905(b), the specifications in the following table apply instead of the specifications in Table 1 of § 1065.205:

TABLE 1 OF § 1065.915—RECOMMENDED MINIMUM PEMS MEASUREMENT INSTRUMENT PERFORMANCE

Measurement	Measured quantity symbol	Rise time, t_{10-90}, and Fall time, t_{90-10}	Recording update frequency	Accuracy [a]	Repeatability [a]	Noise [a]
Engine speed transducer	f_n	1 s	1 Hz means.	5% of pt. or 1% of max.	2% of pt. or 1% of max.	0.5% of max.
Engine torque estimator, BSFC (This is a signal from an engine's ECM).	T or BSFC	1 s	1 Hz means.	8% of pt. or 5% of max.	2% of pt. or 1% of max.	1% of max.
General pressure transducer (not a part of another instrument).	p	5 s	1 Hz	5% of pt. or 5% of max.	2% of pt. or 0.5% of max.	1% of max.
Atmospheric pressure meter	p_{atmos}	50 s	0.1 Hz	250 Pa	200 Pa	100 Pa.
General temperature sensor (not a part of another instrument).	T	5 s	1 Hz	1% of pt. K or 5 K	0.5% of pt. K or 2 K	0.5% of max 0.5 K.
General dewpoint sensor	T_{dew}	50 s	0.1 Hz	3 K	1 K	1 K.
Exhaust flow meter	$\dot{n}$	1 s	1 Hz means.	5% of pt. or 3% of max.	2% of pt	2% of max.
Dilution air, inlet air, exhaust, and sample flow meters.	$\dot{n}$	1 s	1 Hz means.	2.5% of pt. or 1.5% of max.	1.25% of pt. or 0.75% of max.	1% of max.
Continuous gas analyzer	x	5 s	1 Hz	4% of pt. or 4% of meas.	2% of pt. or 2% of meas.	1% of max.
Gravimetric PM balance	m_{PM}			See § 1065.790	0.5 µg	
Inertial PM balance	m_{PM}			4% of pt. or 4% of meas.	2% of pt. or 2% of meas.	1% of max.

[a] Accuracy, repeatability, and noise are all determined with the same collected data, as described in § 1065.305, and based on absolute values. ''pt.'' refers to the overall flow-weighted mean value expected at the standard; ''max.'' refers to the peak value expected at the standard over any test interval, not the maximum of the instrument's range; ''meas'' refers to the actual flow-weighted mean measured over any test interval.

* * * * *

■ 361. Amend § 1065.1001 by revising the definition of ''Test interval'' to read as follows:

§ 1065.1001 Definitions.

* * * * *

Test interval means a duration of time over which you determine mass of emissions. For example, the standard-setting part may specify a complete laboratory duty cycle as a cold-start test interval, plus a hot-start test interval. As another example, a standard-setting part may specify a field-test interval, such as a ''not-to-exceed'' (NTE) event, as a duration of time over which an engine operates within a certain range of speed and torque. In cases where multiple test intervals occur over a duty cycle, the standard-setting part may specify additional calculations that weight and combine results to arrive at composite values for comparison against the applicable standards.

* * * * *

■ 362. Amend § 1065.1005 by revising paragraphs (a), (c), (d), (e), and (f)(2) to read as follows:

§ 1065.1005 Symbols, abbreviations, acronyms, and units of measure.

* * * * *

(a) *Symbols for quantities.* This part uses the following symbols and units of measure for various quantities:

Symbol	Quantity	Unit	Unit symbol	Units in terms of SI base units
α	atomic hydrogen-to-carbon ratio	mole per mole	mol/mol	1
A	area	square meter	m^2	m^2
a_0	intercept of least squares regression.			
a_1	slope of least squares regression.			
a_g	acceleration of Earth's gravity	meter per square second	m/s^2	$m \cdot s^{-2}$
β	ratio of diameters	meter per meter	m/m	1
β	atomic oxygen-to-carbon ratio	mole per mole	mol/mol	1
$C_{\#}$	number of carbon atoms in a molecule.			
c	power-specific carbon mass error coefficient.	gram per kilowatt hour	g/(kW·hr)	$g \cdot 3.6 \cdot 10^{-6} \cdot m^{-2} \cdot kg^{-1} \cdot s^2$
C_d	discharge coefficient.			
C_f	flow coefficient.			
δ	atomic nitrogen-to-carbon ratio	mole per mole	mol/mol	1
d	diameter	meter	m	m
d	power-specific carbon mass rate absolute error coefficent.	gram per kilowatt hour	g/(kW·hr)	$g \cdot 3.6 \cdot 10^{-6} \cdot m^{-2} \cdot kg^{-1} \cdot s^2$
DR	dilution ratio	mole per mole	mol/mol	1
ε	error between a quantity and its reference.			
ε	Difference or error quantity.			
e	brake-specific emission or fuel consumption.	gram per kilowatt hour	g/(kW·hr)	$3.6^{-1} \cdot 10^{-9} \cdot m^{-2} \cdot s^2$
F	F-test statistic.			
f	frequency	hertz	Hz	s^{-1}
f_n	angular speed (shaft)	revolutions per minute	r/min	$\pi \cdot 30^{-1} \cdot s^{-1}$
γ	ratio of specific heats	(joule per kilogram kelvin) per (joule per kilogram kelvin).	(J/(kg·K))/(J/(kg·K))	1
γ	atomic sulfur-to-carbon ratio	mole per mole	mol/mol	1
K	correction factor			1
K_v	calibration coefficient		$m^4 \cdot s \cdot K^{0.5}/kg$	$m^4 \cdot kg^{-1} \cdot s \cdot K^{0.5}$
l	length	meter	m	m
L	limit.			
μ	viscosity, dynamic	pascal second	Pa·s	$m^{-1} \cdot kg \cdot s^{-1}$
M	molar mass [a]	gram per mole	g/mol	$10^{-3} \cdot kg \cdot mol^{-1}$
m	mass	kilogram	kg	kg
$\dot{m}$	mass rate	kilogram per second	kg/s	$kg \cdot s^{-1}$
v	viscosity, kinematic	meter squared per second	m^2/s	$m^2 \cdot s^{-1}$
N	total number in series.			
n	amount of substance	mole	mol	mol
$\dot{n}$	amount of substance rate	mole per second	mol/s	$mol \cdot s^{-1}$
P	power	kilowatt	kW	$10^3 \cdot m^2 \cdot kg \cdot s^{-3}$
PF	penetration fraction.			
p	pressure	pascal	Pa	$m^{-1} \cdot kg \cdot s^{-2}$
ρ	mass density	kilogram per cubic meter	kg/m^3	$m^{-3} \cdot kg$
Δp	differential static pressure	pascal	Pa	$m^{-1} \cdot kg \cdot s^{-2}$
r	ratio of pressures	pascal per pascal	Pa/Pa	1
r^2	coefficient of determination.			
Ra	average surface roughness	micrometer	µm	$10^{-6} \cdot m$
$Re_{\#}$	Reynolds number.			
RF	response factor.			
RH	relative humidity.			
σ	non-biased standard deviation.			
S	Sutherland constant	kelvin	K	K
SEE	standard estimate of error.			
T	absolute temperature	kelvin	K	K
T	Celsius temperature	degree Celsius	°C	K − 273.15
T	torque (moment of force)	newton meter	N·m	$m^2 \cdot kg \cdot s^{-2}$
θ	plane angle	degrees	°	rad
t	time	second	s	s
Δt	time interval, period, 1/frequency	second	s	s
V	volume	cubic meter	m^3	m^3
$\dot{V}$	volume rate	cubic meter per second	m^3/s	$m^3 \cdot s^{-1}$
W	work	kilowatt-hour	kW·hr	$3.6 \cdot 10^6 \cdot m^2 \cdot kg \cdot s^{-2}$
w_C	carbon mass fraction	gram per gram	g/g	1
x	amount of substance mole fraction [b]	mole per mole	mol/mol	1
$\bar{x}$	flow-weighted mean concentration	mole per mole	mol/mol	1
y	generic variable.			
Z	compressibility factor.			

[a] See paragraph (f)(2) of this section for the values to use for molar masses. Note that in the cases of NO_X and HC, the regulations specify effective molar masses based on assumed speciation rather than actual speciation.

[b] Note that mole fractions for THC, THCE, NMHC, NMHCE, and NOTHC are expressed on a C_1-equivalent basis.

* * * * *

(c) *Prefixes.* This part uses the following prefixes for units and unit symbols:

Symbol	Prefix name	Factor
μ	micro	10^{-6}
m	milli	10^{-3}
c	centi	10^{-2}
k	kilo	10^{3}
M	mega	10^{6}

(d) *Superscripts.* This part uses the following superscripts for modifying quantity symbols:

Superscript	Meaning
overbar (such as $\bar{y}$)	arithmetic mean.
overdot (such as $\dot{y}$)	quantity per unit time.

(e) *Subscripts.* This part uses the following subscripts for modifying quantity symbols:

Subscript	Meaning
a	absolute (*e.g.*, absolute difference or error).
abs	absolute quantity.
act	actual condition.
air	air, dry.
amb	ambient.
atmos	atmospheric.
bkgnd	background.
cal	calibration quantity.
CFV	critical flow venturi.
C	carbon mass.
comb	combined.
comp	composite value.
cor	corrected quantity.
dil	dilution air.
dew	dewpoint.
dexh	diluted exhaust.
dry	dry condition.
dutycycle	duty cycle.
ε	related to a difference or error quantity.
exh	raw exhaust.
exp	expected quantity.
fluid	fluid stream.
fn	feedback speed.
frict	friction.
fuel	fuel consumption.
hi,idle	condition at high-idle.
i	an individual of a series.
idle	condition at idle.
in	quantity in.
init	initial quantity, typically before an emission test.
int	intake air.
j	an individual of a series.
mapped	conditions over which an engine can operate.
max	the maximum (*i.e.*, peak) value expected at the standard over a test interval; not the maximum of an instrument range.
meas	measured quantity.
media	PM sample media.
mix	mixture of diluted exhaust and air.
norm	normalized.
out	quantity out.
P	power.
part	partial quantity.
PDP	positive-displacement pump.
post	after the test interval.
pre	before the test interval.
prod	stoichiometric product.
r	relative (*e.g.*, relative difference or error).
rate	rate (divided by time).
record	record rate.
ref	reference quantity.
rev	revolution.
sat	saturated condition.
s	slip.
span	span quantity.
SSV	subsonic venturi.
std	standard condition.
stroke	engine strokes per power stroke.
T	torque.
test	test quantity.
test, alt	alternate test quantity.
uncor	uncorrected quantity.
vac	vacuum side of the sampling system.
weight	calibration weight.

Subscript	Meaning
zero	zero quantity.

(f) * * *

(2) This part uses the following molar masses or effective molar masses of chemical species:

Symbol	Quantity	g/mol (10^{-3}·kg·mol^{-1})
M_{air}	molar mass of dry air [a]	28.96559
M_{Ar}	molar mass of argon	39.948
M_{C}	molar mass of carbon	12.0107
M_{CH3OH}	molar mass of methanol	32.04186
M_{C2H5OH}	molar mass of ethanol	46.06844
M_{C2H4O}	molar mass of acetaldehyde	44.05256
M_{CH4N2O}	molar mass of urea	60.05526
M_{C2H6}	molar mass of ethane	30.06904
M_{C3H8}	molar mass of propane	44.09562
M_{C3H7OH}	molar mass of propanol	60.09502
M_{CO}	molar mass of carbon monoxide	28.0101
M_{CH4}	molar mass of methane	16.0425
M_{CO2}	molar mass of carbon dioxide	44.0095
M_{H}	molar mass of atomic hydrogen	1.00794
M_{H2}	molar mass of molecular hydrogen	2.01588
M_{H2O}	molar mass of water	18.01528
M_{CH2O}	molar mass of formaldehyde	30.02598
M_{He}	molar mass of helium	4.002602
M_{N}	molar mass of atomic nitrogen	14.0067
M_{N2}	molar mass of molecular nitrogen	28.0134
M_{NH3}	molar mass of ammonia	17.03052
M_{NMHC}	effective C_1 molar mass of nonmethane hydrocarbon [b]	13.875389
M_{NMHCE}	effective C_1 molar mass of nonmethane hydrocarbon equivalent [b]	13.875389
M_{NMNEHC}	effective C_1 molar mass of nonmethane-nonethane hydrocarbon [b]	13.875389
M_{NOx}	effective molar mass of oxides of nitrogen [c]	46.0055
M_{N2O}	molar mass of nitrous oxide	44.0128
M_{O}	molar mass of atomic oxygen	15.9994
M_{O2}	molar mass of molecular oxygen	31.9988
M_{S}	molar mass of sulfur	32.065
M_{THC}	effective C_1 molar mass of total hydrocarbon [b]	13.875389
M_{THCE}	effective C_1 molar mass of total hydrocarbon equivalent [b]	13.875389

[a] See paragraph (f)(1) of this section for the composition of dry air.
[b] The effective molar masses of THC, THCE, NMHC, NMHCE, and NMNEHC are defined on a C_1 basis and are based on an atomic hydrogen-to-carbon ratio, α, of 1.85 (with β, γ, and δ equal to zero).
[c] The effective molar mass of NO_X is defined by the molar mass of nitrogen dioxide, NO_2.

* * * * *

PART 1066—VEHICLE-TESTING PROCEDURES

■ 363. The authority statement for part 1066 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 364. Amend § 1066.1 by revising paragraph (g) to read as follows:

§ 1066.1 Applicability.

* * * * *

(g) For additional information regarding these test procedures, visit our website at *www.epa.gov*, and in particular *https://www.epa.gov/vehicle-and-fuel-emissions-testing/vehicle-testing-regulations*.

■ 365. Amend § 1066.135 by revising paragraph (a)(1) to read as follows:

§ 1066.135 Linearity verification.

* * * * *

(a) * * *

(1) Use instrument manufacturer recommendations and good engineering judgment to select at least ten reference values, $y_{refi,}$ that cover the range of values that you expect during testing (to prevent extrapolation beyond the verified range during emission testing). We recommend selecting zero as one of your reference values. For each range calibrated, if the deviation from a least-squares best-fit straight line is 2% or less of the value at each data point, concentration values may be calculated by use of a straight-line curve fit for that range. If the deviation exceeds 2% at any point, use the best-fit nonlinear equation that represents the data to within 2% of each test point to determine concentration. If you use a gas divider to blend calibration gases, you may verify that the calibration curve produced names a calibration gas within 2% of its certified concentration. Perform this verification between 10 and 60% of the full-scale analyzer range.

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■ 366. Amend § 1066.210 by revising paragraph (d)(3) to read as follows:

§ 1066.210 Dynamometers.

* * * * *

(d) * * *

(3) The load applied by the dynamometer simulates forces acting on the vehicle during normal driving according to the following equation:

$$FR_i = A \cdot \cos\left(\operatorname{atan}\left(G_{i-1}\right)\right) + B \cdot v_i + C \cdot v_i^2 + M_e \cdot \frac{v_i - v_{i-1}}{t_i - t_{i-1}} + M \cdot a_g \cdot \sin\left(\operatorname{atan}\left(G_{i-1}\right)\right)$$

Eq. 1066.210-1

Where:

FR = total road-load force to be applied at the surface of the roll. The total force is the sum of the individual tractive forces applied at each roll surface.

i = a counter to indicate a point in time over the driving schedule. For a dynamometer operating at 10-Hz intervals over a 600-second driving schedule, the maximum value of i should be 6,000.

A = a vehicle-specific constant value representing the vehicle's frictional load in lbf or newtons. See subpart D of this part.

G_i = instantaneous road grade, in percent. If your duty cycle is not subject to road grade, set this value to 0.

B = a vehicle-specific coefficient representing load from drag and rolling resistance, which are a function of vehicle speed, in lbf/(mi/hr) or Ns/m. See subpart D of this part.

v = instantaneous linear speed at the roll surfaces as measured by the dynamometer, in mi/hr or m/s. Let v_{i-1} = 0 for i = 0.

C = a vehicle-specific coefficient representing aerodynamic effects, which are a function of vehicle speed squared, in lbf/(mi/hr)^2 or N·s^2/m^2. See subpart D of this part.

M_e = the vehicle's effective mass in lbm or kg, including the effect of rotating axles as specified in § 1066.310(b)(7).

t = elapsed time in the driving schedule as measured by the dynamometer, in seconds. Let t_{i-1} = 0 for i = 0.

M = the measured vehicle mass, in lbm or kg.

a_g = acceleration of Earth's gravity = 9.80665 m/s^2.

* * * * *

■ 367. Amend § 1066.255 by revising paragraph (c) to read as follows:

§ 1066.255 Parasitic loss verification.

* * * * *

(c) *Procedure.* Perform this verification by following the dynamometer manufacturer's specifications to establish a parasitic loss curve, taking data at fixed speed intervals to cover the range of vehicle speeds that will occur during testing. You may zero the load cell at a selected speed if that improves your ability to determine the parasitic loss. Parasitic loss forces may never be negative. Note that the torque transducers must be mathematically zeroed and spanned prior to performing this procedure.

* * * * *

■ 368. Amend § 1066.270 by revising paragraph (c)(4) to read as follows:

§ 1066.270 Unloaded coastdown verification.

* * * * *

(c) * * *

(4) Determine the mean coastdown force, $\bar{F}$, for each speed and inertia setting for each of the coastdowns performed using the following equation:

$$\bar{F} = \frac{I \cdot \left(v_{init} - v_{final}\right)}{t}$$

Eq. 1066.270-1

Where:

$\bar{F}$ = the mean force measured during the coastdown for each speed interval and inertia setting, expressed in lbf and rounded to four significant figures.

I = the dynamometer's inertia setting, in lbf·s^2/ft.

v_{init} = the speed at the start of the coastdown interval, expressed in ft/s to at least four significant figures.

v_{final} = the speed at the end of the coastdown interval, expressed in ft/s to at least four significant figures.

t = coastdown time for each speed interval and inertia setting, accurate to at least 0.01 s.

Example:

I = 2000 lbm = 62.16 lbf·s^2/ft

v_{init} = 25 mi/hr = 36.66 ft/s

v_{final} = 15 mi/hr = 22.0 ft/s

t = 5.00 s

$$\bar{F} = \frac{62.16 \cdot \left(36.66 - 22.0\right)}{5.00}$$

$$\bar{F} = 182.3 \text{ lbf}$$

* * * * *

■ 369. Amend § 1066.275 by revising paragraph (b) to read as follows:

§ 1066.275 Daily dynamometer readiness verification.

* * * * *

(b) *Scope and frequency.* Perform this verification upon initial installation, within 1 day before testing, and after major maintenance. You may run this within 7 days before testing if, over a period of time, you have data to support a less frequent verification interval.

* * * * *

■ 370. Revise § 1066.405 to read as follows:

§ 1066.405 Vehicle preparation, preconditioning, and maintenance.

(a) Prepare the vehicle for testing (including measurement of evaporative and refueling emissions if appropriate), as described in the standard-setting part.

(b) If you inspect a vehicle, keep a record of the inspection and update your application to document any changes that result. You may use any kind of equipment, instrument, or tool to identify bad engine components or perform maintenance if it is available at dealerships and other service outlets.

(c) You may repair a test vehicle as needed for defective parts that are unrelated to emission control. You must ask us to approve repairs that might affect the vehicle's emission controls. If we determine that a part failure, system malfunction, or associated repairs make the vehicle's emission controls unrepresentative of production engines, you may no longer use it as an emission-data vehicle. Also, if engine installed in the test vehicle has a major mechanical failure that requires you to take the vehicle apart, you may no longer use the vehicle as an emission-data vehicle.

■ 371. Amend § 1066.420 by revising paragraph (d)(2) to read as follows:

§ 1066.420 Test preparation.

* * * * *

(d) * * *

(2) For vehicles above 14,000 pounds GVWR, you may test vehicles at any humidity.

TABLE 1 OF § 1066.420—TEST CELL HUMIDITY REQUIREMENTS

Test cycle	Humidity requirement (grains H_2O per pound dry air)	Tolerance (grains H_2O per pound dry air)
AC17	69	± 5 average, ± 10 instantaneous
FTP[a] and LA–92.	50	
HFET	50	
SC03	100	± 5
US06	50	

[a] FTP humidity requirement does not apply for cold (−7 °C), intermediate (10 °C), and hot (35 °C) temperature testing.

* * * * *

■ 372. Amend § 1066.605 by revising paragraphs (c)(4) and (h)(2)(i) to read as follows:

§ 1066.605 Mass-based and molar-based exhaust emission calculations.

* * * * *

(c) * * *

(4) For vehicles at or below 14,000 pounds GVWR, calculate HC concentrations, including dilution air background concentrations, as described in this section, and as described in § 1066.635 for NMOG. For emission testing of vehicles above 14,000 pounds GVWR, with fuels that contain 25% or more oxygenated compounds by volume, calculate THCE and NMHCE concentrations, including dilution air background concentrations, as described in 40 CFR part 1065, subpart I.

* * * * *

(h) * * *

(2) * * *

(i) *Varying flow rate.* If you continuously sample from a varying exhaust flow rate, calculate $V_{[flow]}$ using the following equation:

$$V_{[flow]} = \sum_{i=1}^{N} \dot{Q}_i \cdot \Delta t$$

Eq. 1066.605-10

Where:

$$\Delta t = 1/f_{record}$$

Eq. 1066.605-11

Example:

$N = 505$
$\dot{Q}_{cvs1} = 0.276\ m^3/s$
$\dot{Q}_{cvs2} = 0.294\ m^3/s$
$f_{record} = 1\ Hz$

Using Eq. 1066.605-11,

$\Delta t = 1/1 = 1\ s$
$V_{cvs}\ (0.276 + 0.294 + ... + \dot{Q}_{cvs505}) \cdot 1$
$V_{cvs} = 170.721\ m^3$

* * * * *

■ 373. Amend § 1066.610 by revising paragraph (d) to read as follows:

§ 1066.610 Dilution air background correction.

* * * * *

(d) Determine the time-weighted dilution factor, DF_w, over the duty cycle using the following equation:

$$DF_w = \frac{\sum_{i=1}^{N} t_i}{\sum_{i=1}^{N} \frac{1}{DF_i} \cdot t_i}$$

Eq. 1066.610-4

Where:

N = number of test intervals.
i = test interval number
t = duration of the test interval.
DF = dilution factor over the test interval.

Example:

$N = 3$
$DF_1 = 14.40$
$t_1 = 505\ s$
$DF_2 = 24.48$
$t_2 = 867\ s$
$DF_3 = 17.28$
$t_3 = 505\ s$

$$DF_w = \frac{505 + 867 + 505}{\left(\frac{1}{14.40} \cdot 505\right) + \left(\frac{1}{24.48} \cdot 867\right) + \left(\frac{1}{17.28} \cdot 505\right)} = 18.82$$

■ 374. Amend § 1066.710 by revising paragraph (c) to read as follows:

§ 1066.710 Cold temperature testing procedures for measuring CO and NMHC emissions and determining fuel economy.

* * * * *

(c) *Heater and defroster.* During the test, operate the vehicle's interior climate control system with the heat on and air conditioning off. You may not use any supplemental auxiliary heat during this testing. You may set the heater to any temperature and fan setting during vehicle preconditioning.

(1) *Manual control.* Unless you rely on automatic control as specified in paragraph (c)(2) of this section, take the following steps to control heater settings:

(i) Set the climate control system as follows before the first acceleration (t = 20 s), or before starting the vehicle if the climate control system allows it:

(A) *Temperature.* Set controls to maximum heat. For systems that allow the operator to select a specific temperature, set the heater control to 72 °F or higher.

(B) *Fan speed.* Set the fan speed to full off or the lowest available speed if a full off position is not available.

(C) *Airflow direction.* Direct airflow to the front window (window defrost mode).

(D) *Air source.* If independently controllable, set the system to draw in outside air.

(ii) At the second idle of the test cycle, which occurs 125 seconds after the start of the test, set the fan speed to maximum. Complete by 130 seconds after the start of the test. Leave temperature and air source settings unchanged

(iii) At the sixth idle of the test interval, which occurs at the deceleration to zero miles per hour 505 seconds after the start of the test, set the fan speed to the lowest setting that maintains air flow. Complete these changes by 510 seconds after the start of the test. You may use different vent and fan speed settings for the remainder of the test. Leave the temperature and air source settings unchanged.

(2) *Automatic control.* Vehicles with automatic control systems may instead operate as described in this paragraph (c)(2). Set the temperature to 72 °F in automatic control for the whole test. If the system allows the operator to select the location of the output airflow without disabling automatic control, set the air flow control to the front window defrost mode for the whole test.

(3) *Multiple-zone systems.* For vehicles that have separate driver and passenger controls or separate front and rear controls, you must set all temperature and fan controls as described in paragraphs (c)(1) and (2) of this section, except that rear controls need not be set to defrost the front window.

(4) *Alternative test procedures.* We may approve the use of other settings under 40 CFR 86.1840 if a vehicle's climate control system is not compatible with the provisions of this section.

* * * * *

■ 375. Amend § 1066.801 by revising paragraph (e) to read as follows:

§ 1066.801 Applicability and general provisions.

* * * * *

(e) The following figure illustrates the FTP test sequence for measuring exhaust and evaporative emissions:

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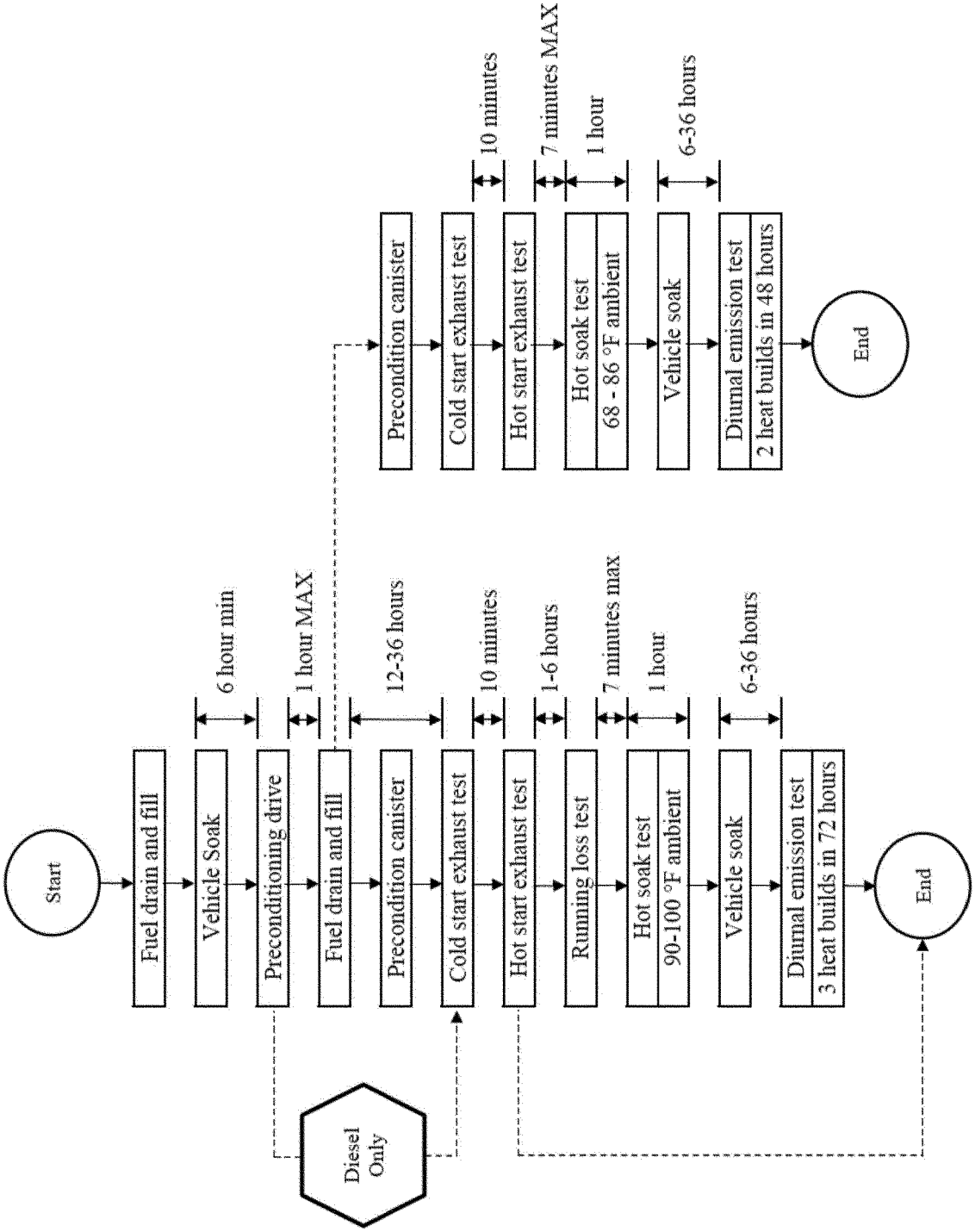
Figure 1 of § 1066.801–FTP test sequence



BILLING CODE 6560–50–C

■ 376. Amend § 1066.835 by revising paragraph (a) to read as follows:

§ 1066.835 Exhaust emission test procedure for SC03 emissions.

* * * * *

(a) Drain and refill the vehicle's fuel tank(s) if testing starts more than 72 hours after the most recent FTP or HFET measurement (with or without evaporative emission measurements).

* * * * *

■ 377. Revise § 1066.930 to read as follows:

§ 1066.930 Equipment for point-source measurement of running losses.

For point-source measurement of running loss emissions, use equipment meeting the specifications in 40 CFR 86.107–96(i).

■ 378. Amend § 1066.1005 by revising paragraphs (c), (d), and (f) to read as follows:

§ 1066.1005 Symbols, abbreviations, acronyms, and units of measure.

* * * * *

(c) *Superscripts.* This part uses the following superscripts for modifying quantity symbols:

Superscript	Meaning
overbar (such as $\bar{y}$) ...	arithmetic mean.
overdot (such as $\dot{y}$) ...	quantity per unit time.

(d) *Subscripts.* This part uses the following subscripts for modifying quantity symbols:

Subscript	Meaning
0	reference.
abs	absolute quantity.
AC17	air conditioning 2017 test interval.
act	actual or measured condition.
actint	actual or measured condition over the speed interval.
adj	adjusted.
air	air, dry.
atmos	atmospheric.
b	base.
bkgnd	background.
c	cold.
comp	composite.
cor	corrected.
cs	cold stabilized.
ct	cold transient.
cUDDS	cold-start UDDS.
D	driven.
dew	dewpoint.
dexh	dilute exhaust quantity.
dil	dilute.
e	effective.
emission	emission specie.
error	error.
EtOH	ethanol.
exh	raw exhaust quantity.
exp	expected quantity.
fil	filter.
final	final.
flow	flow measurement device type.
gas	gaseous.
h	hot.
HFET	highway fuel economy test.
hs	hot stabilized.
ht	hot transient.
hUDDS	hot-start UDDS.
i	an individual of a series.
ID	driven inertia.
in	inlet.
int	intake.
init	initial quantity, typically before an emission test.
IT	target inertia.
liq	liquid.
max	the maximum (i.e., peak) value expected at the standard over a test interval; not the maximum of an instrument range.
meas	measured quantity.
mix	dilute exhaust gas mixture.
out	outlet.
PM	particulate matter.
record	record.
ref	reference quantity.
rev	revolution.
roll	dynamometer roll.
s	settling.
s	slip.
s	stabilized.
sat	saturated condition.
SC03	air conditioning driving schedule.
span	span quantity.
sda	secondary dilution air.
std	standard conditions.
T	target.
t	throat.
test	test quantity.
uncor	uncorrected quantity.
w	weighted.
zero	zero quantity.

* * * * *

(f) This part uses the following densities of chemical species:

Symbol	Quantity [a] [b]	g/m³	g/ft³
ρ_{CH4}	density of methane	666.905	18.8847
ρ_{CH3OH}	density of methanol	1332.02	37.7185
ρ_{C2H5OH}	C_1-equivalent density of ethanol	957.559	27.1151
ρ_{C2H4O}	C_1-equivalent density of acetaldehyde	915.658	25.9285
ρ_{C3H8}	density of propane	611.035	17.3026
ρ_{C3H7OH}	C_1-equivalent density of propanol	832.74	23.5806
ρ_{CO}	density of carbon monoxide	1164.41	32.9725
ρ_{CO2}	density of carbon dioxide	1829.53	51.8064
$\rho_{HC\text{-}gas}$	effective density of hydrocarbon—gaseous fuel [c]	(see 3)	(see 3)
ρ_{CH2O}	density of formaldehyde	1248.21	35.3455
$\rho_{HC\text{-}liq}$	effective density of hydrocarbon—liquid fuel [d]	576.816	16.3336
$\rho_{NMHC\text{-}gas}$	effective density of nonmethane hydrocarbon—gaseous fuel [c]	(see 3)	(see 3)
$\rho_{NMHC\text{-}liq}$	effective density of nonmethane hydrocarbon—liquid fuel [d]	576.816	16.3336
$\rho_{NMHCE\text{-}gas}$	effective density of nonmethane equivalent hydrocarbon—gaseous fuel [c]	(see 3)	(see 3)
$\rho_{NMHCE\text{-}liq}$	effective density of nonmethane equivalent hydrocarbon—liquid fuel [d]	576.816	16.3336
ρ_{NOx}	effective density of oxides of nitrogen [e]	1912.5	54.156
ρ_{N2O}	density of nitrous oxide	1829.66	51.8103
$\rho_{THC\text{-}liq}$	effective density of total hydrocarbon—liquid fuel [d]	576.816	16.3336
$\rho_{THCE\text{-}liq}$	effective density of total equivalent hydrocarbon—liquid fuel [d]	576.816	16.3336

[a] Densities are given at 20 °C and 101.325 kPa.
[b] Densities for all hydrocarbon containing quantities are given in g/m³-carbon atom and g/ft³-carbon atom.
[c] The effective density for natural gas fuel and liquefied petroleum gas fuel are defined by an atomic hydrogen-to-carbon ratio, α, of the hydrocarbon components of the test fuel. $\rho_{HCgas} = 41.57 \cdot (12.011 + (\alpha \cdot 1.008))$.
[d] The effective density for gasoline and diesel fuel are defined by an atomic hydrogen-to-carbon ratio, α, of 1.85.
[e] The effective density of NO_X is defined by the molar mass of nitrogen dioxide, NO_2.

* * * * *

■ 379. Amend § 1066.1010 by revising paragraph (b)(2) to read as follows:

§ 1066.1010 1010 Incorporation by reference.

* * * * *

(b) * * *

(2) SAE J1634, Battery Electric Vehicle Energy Consumption and Range Test Procedure, revised July 2017, IBR approved for § 1066.501(a).

* * * * *

PART 1068—GENERAL COMPLIANCE PROVISIONS FOR HIGHWAY, STATIONARY, AND NONROAD PROGRAMS

■ 380. The authority statement for part 1068 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

■ 381. Amend § 1068.1 by revising paragraph (a) and removing and reserving paragraph (d)(2) to n reads as follows:

§ 1068.1 Does this part apply to me?

(a) The provisions of this part apply to everyone with respect to the engine and equipment categories as described in this paragraph (a). They apply to everyone, including owners, operators, parts manufacturers, and persons performing maintenance. Where we identify an engine category, the provisions of this part also apply with respect to the equipment using such engines. This part 1068 applies to different engine and equipment categories as follows:

(1) This part 1068 applies to motor vehicles we regulate under 40 CFR part 86, subpart S, to the extent and in the manner specified in 40 CFR parts 85 and 86.

(2) This part 1068 applies for heavy-duty motor vehicles we regulate under 40 CFR part 1037, subject to the provisions of 40 CFR parts 85 and 1037. This includes trailers. This part 1068 applies to other heavy-duty motor vehicles and motor vehicle engines to the extent and in the manner specified in 40 CFR parts 85, 86, and 1036.

(3) This part 1068 applies to highway motorcycles we regulate under 40 CFR part 86, subparts E and F, to the extent and in the manner specified in 40 CFR parts 85 and 86.

(4) This part 1068 applies to aircraft we regulate under 40 CFR part 87 to the extent and in the manner specified in 40 CFR part 87.

(5) This part 1068 applies for locomotives that are subject to the provisions of 40 CFR part 1033. This part 1068 does not apply for locomotives or locomotive engines that were originally manufactured before July 7, 2008, and that have not been remanufactured on or after July 7, 2008.

(6) This part 1068 applies for land-based nonroad compression-ignition engines that are subject to the provisions of 40 CFR part 1039.

(7) This part 1068 applies for stationary compression-ignition engines certified using the provisions of 40 CFR parts 1039 and 1042 as described in 40 CFR part 60, subpart IIII.

(8) This part 1068 applies for marine compression-ignition engines that are subject to the provisions of 40 CFR part 1042.

(9) This part 1068 applies for marine spark-ignition engines that are subject to the provisions of 40 CFR part 1045.

(10) This part 1068 applies for large nonroad spark-ignition engines that are subject to the provisions of 40 CFR part 1048.

(11) This part 1068 applies for stationary spark-ignition engines certified using the provisions of 40 CFR part 1048 or part 1054, as described in 40 CFR part 60, subpart JJJJ.

(12) This part 1068 applies for recreational engines and vehicles, including snowmobiles, off-highway motorcycles, and all-terrain vehicles that are subject to the provisions of 40 CFR part 1051.

(13) This part applies for small nonroad spark-ignition engines that are subject to the provisions of 40 CFR part 1054.

(14) This part applies for fuel-system components installed in nonroad equipment powered by volatile liquid fuels that are subject to the provisions of 40 CFR part 1060.

* * * * *

■ 382. Amend § 1068.10 by revising the section heading and paragraphs (b) and (c) to read as follows:

§ 1068.10 Confidential business information.

* * * * *

(b) We will store your confidential business information as described in 40 CFR part 2. Also, we will disclose it only as specified in 40 CFR part 2. This applies both to any information you send us and to any information we collect from inspections, audits, or other site visits.

(c) If you send us a second copy without the confidential business information, we will assume it contains nothing confidential whenever we need to release information from it.

* * * * *

■ 383. Amend § 1068.30 by adding a definition for ''Element of design'' in alphabetical order to read as follows:

§ 1068.30 Definitions.

* * * * *

Element of design includes any computer software, electronic control system, emission control system, or computer logic, along with any related calibrations. *Element of design* also includes the results of related interaction with hardware items or other parameter settings on engines/equipment.

* * * * *

■ 384. Amend § 1068.240 by revising paragraph (c)(3) to read as follows:

§ 1068.240 Exempting new replacement engines.

* * * * *

(c) * * *

(3) Send the Designated Compliance Officer a report by September 30 of the year following any year in which you produced exempted replacement engines under this paragraph (c). In your report include the total number of replacement engines you produce under this paragraph (c) for each category or subcategory, as appropriate, and the corresponding total production volumes determined under paragraph (c)(1) of this section. If you send us a report under this paragraph (c)(3), you must also include the total number of replacement engines you produced under paragraphs (b), (d), and (e) of this section (including any replacement marine engines subject to reporting under 40 CFR 1042.615). Count exempt engines as tracked under paragraph (b) of this section only if you meet all the requirements and conditions that apply under paragraph (b)(2) of this section by the due date for the annual report. You may include the information required under this paragraph (c)(3) in production reports required under the standard-setting part.

* * * * *

[FR Doc. 2020–05963 Filed 5–11–20; 8:45 am]

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Part III

Bureau of Consumer Financial Protection

12 CFR Part 1003

Home Mortgage Disclosure (Regulation C); Final Rule

BUREAU OF CONSUMER FINANCIAL PROTECTION

12 CFR Part 1003

[Docket No. CFPB–2019–0021]

RIN 3170–AA76

Home Mortgage Disclosure (Regulation C)

AGENCY: Bureau of Consumer Financial Protection.

ACTION: Final rule; official interpretation.

SUMMARY: The Bureau of Consumer Financial Protection (Bureau) is amending Regulation C to increase the threshold for reporting data about closed-end mortgage loans, so that institutions originating fewer than 100 closed-end mortgage loans in either of the two preceding calendar years will not have to report such data effective July 1, 2020. The Bureau is also setting the threshold for reporting data about open-end lines of credit at 200 open-end lines of credit effective January 1, 2022, upon the expiration of the current temporary threshold of 500 open-end lines of credit.

DATES: This final rule is effective on July 1, 2020, except for the amendments to § 1003.2 in amendatory instruction 5, the amendments to § 1003.3 in amendatory instruction 6, and the amendments to supplement I to part 1003 in amendatory instruction 7, which are effective on January 1, 2022. See part VI for more information.

FOR FURTHER INFORMATION CONTACT: Jaydee DiGiovanni, Counsel; or Amanda Quester or Alexandra Reimelt, Senior Counsels, Office of Regulations, at 202–435–7700 or *https://reginquiries.consumerfinance.gov.* If you require this document in an alternative electronic format, please contact *CFPB_Accessibility@cfpb.gov.*

SUPPLEMENTARY INFORMATION:

I. Summary of the Final Rule

Regulation C, 12 CFR part 1003, implements the Home Mortgage Disclosure Act (HMDA), 12 U.S.C. 2801 through 2810. In an October 2015 final rule (2015 HMDA Rule), the Bureau established institutional and transactional coverage thresholds in Regulation C that determine whether financial institutions are required to collect, record, and report any HMDA data on closed-end mortgage loans or open-end lines of credit (collectively, coverage thresholds).[1]

The 2015 HMDA Rule set the closed-end threshold at 25 loans in each of the two preceding calendar years, and the open-end threshold at 100 open-end lines of credit in each of the two preceding calendar years. In 2017, before those thresholds took effect, the Bureau temporarily increased the open-end threshold to 500 open-end lines of credit for two years (calendar years 2018 and 2019). In October 2019, the Bureau extended to January 1, 2022, the temporary threshold of 500 open-end lines of credit for open-end coverage.

This final rule adjusts Regulation C's coverage thresholds for closed-end mortgage loans and open-end lines of credit.[2] Effective July 1, 2020, this final rule permanently raises the closed-end coverage threshold from 25 to 100 closed-end mortgage loans in each of the two preceding calendar years. The final rule also amends § 1003.3(c)(11) and comment 3(c)(11)–2 so that institutions have the option to report closed-end data collected in 2020 if they: (1) Meet the definition of financial institution as of January 1, 2020 but are newly excluded on July 1, 2020 by the increase in the closed-end threshold, and (2) report closed-end data for the full calendar year. The final rule sets the permanent open-end threshold at 200 open-end lines of credit effective January 1, 2022, upon expiration of the temporary threshold of 500 open-end lines of credit.

II. Background

A. HMDA and Regulation C

HMDA requires certain depository institutions and for-profit nondepository institutions to report data about originations and purchases of mortgage loans, as well as mortgage loan applications that do not result in originations (for example, applications that are denied or withdrawn). The purposes of HMDA are to provide the public with loan data that can be used: (i) To help determine whether financial institutions are serving the housing needs of their communities; (ii) to assist public officials in distributing public-sector investment so as to attract private investment to areas where it is needed; and (iii) to assist in identifying possible discriminatory lending patterns and enforcing antidiscrimination statutes.[3] Prior to the enactment of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), Regulation C required reporting of 22 data points and allowed for optional reporting of the reasons for which an institution denied an application.[4]

B. Dodd-Frank Act

In 2010, Congress enacted the Dodd-Frank Act, which amended HMDA and transferred HMDA rulemaking authority and other functions from the Board of Governors of the Federal Reserve System (Board) to the Bureau.[5] Among other changes, the Dodd-Frank Act expanded the scope of information relating to mortgage applications and loans that institutions must compile, maintain, and report under HMDA. Specifically, the Dodd-Frank Act amended HMDA section 304(b)(4) by adding one new data point. The Dodd-Frank Act also added new HMDA section 304(b)(5) and (6), which requires various additional new data points.[6] New HMDA section 304(b)(6), in addition, authorizes the Bureau to require, ''as [it] may determine to be appropriate,'' a unique identifier that identifies the loan originator, a universal loan identifier (ULI), and the parcel number that corresponds to the real property pledged as collateral for the mortgage loan.[7] New HMDA section 304(b)(5)(D) and (6)(J) further provides the Bureau with the authority to mandate reporting of ''such other information as the Bureau may require.''[8]

C. 2015 HMDA Rule

In October 2015, the Bureau issued the 2015 HMDA Rule implementing the Dodd-Frank Act amendments to HMDA.[9] Most of the 2015 HMDA Rule

[1] Home Mortgage Disclosure (Regulation C), 80 FR 66128 (Oct. 28, 2015). HMDA requires financial institutions to collect, record, and report data. To simplify review of this document, the Bureau generally refers herein to the obligation to report data instead of listing all of these obligations in each instance.

[2] When amending the Bureau's commentary, the Office of the Federal Register requires reprinting of certain subsections being amended in their entirety rather than providing more targeted amendatory instructions and commentary. The subsections of regulatory text and commentary included in this document show the complete language of those subsections. In addition, the Bureau is releasing an unofficial, informal redline to assist industry and other stakeholders in reviewing the changes that it is finalizing to the regulatory text and commentary of Regulation C. This redline can be found on the Bureau's regulatory implementation page for the HMDA Rule at *https://www.consumerfinance.gov/policy-compliance/guidance/hmda-implementation/.* If any conflicts exist between the redline and this final rule, this final rule is the controlling document.

[3] 12 CFR 1003.1.

[4] As used in this final rule, the term ''data point'' refers to items of information that entities are required to compile and report, generally listed in separate paragraphs in Regulation C. Some data points are reported using multiple data fields.

[5] Public Law 111–203, 124 Stat. 1376, 1980, 2035–38, 2097–101 (2010).

[6] Dodd-Frank Act section 1094(3), *amending* HMDA section 304(b), 12 U.S.C. 2803(b).

[7] *Id.*

[8] *Id.*

[9] 80 FR 66128 (Oct. 28, 2015).

took effect on January 1, 2018.[10] The 2015 HMDA Rule implemented the new data points specified in the Dodd-Frank Act, added a number of additional data points pursuant to the Bureau's discretionary authority under HMDA section 304(b)(5) and (6), and made revisions to certain pre-existing data points to clarify their requirements, provide greater specificity in reporting, and align certain data points more closely with industry data standards, among other changes.

The 2015 HMDA Rule requires some financial institutions to report data on certain dwelling-secured, open-end lines of credit, including home-equity lines of credit. Prior to the 2015 HMDA Rule, Regulation C allowed, but did not require, reporting of home-equity lines of credit.

The 2015 HMDA Rule also established institutional coverage thresholds based on loan volume that limit the definition of ''financial institution'' to include only those institutions that either originated at least 25 closed-end mortgage loans in each of the two preceding calendar years or originated at least 100 open-end lines of credit in each of the two preceding calendar years.[11] The 2015 HMDA Rule separately established transactional coverage thresholds that are part of the test for determining which loans are excluded from coverage and were designed to work in tandem with the institutional coverage thresholds.[12]

D. 2017 HMDA Rule

In April 2017, the Bureau issued a notice of proposed rulemaking to address certain technical errors in the 2015 HMDA Rule, ease the burden of reporting certain data requirements, and clarify key terms to facilitate compliance with Regulation C.[13] In July 2017, the Bureau issued a notice of proposed rulemaking (July 2017 HMDA Proposal) to increase temporarily the 2015 HMDA Rule's open-end coverage threshold of 100 for both institutional and transactional coverage, so that institutions originating fewer than 500 open-end lines of credit in either of the two preceding calendar years would not have to commence collecting or reporting data on their open-end lines of credit until January 1, 2020.[14] In August 2017, the Bureau issued the 2017 HMDA Rule, which, inter alia, temporarily increased the open-end threshold to 500 open-end lines of credit for calendar years 2018 and 2019.[15] In doing so, the Bureau indicated that the two-year period would allow time for the Bureau to decide, through an additional rulemaking, whether any permanent adjustments to the open-end threshold are needed.[16]

E. Economic Growth, Regulatory Relief, and Consumer Protection Act and 2018 HMDA Rule

On May 24, 2018, the President signed into law the Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA).[17] Section 104(a) of the EGRRCPA amends HMDA section 304(i) by adding partial exemptions from HMDA's requirements for certain insured depository institutions and insured credit unions.[18] New HMDA section 304(i)(1) provides that the requirements of HMDA section 304(b)(5) and (6) shall not apply with respect to closed-end mortgage loans of an insured depository institution or insured credit union if it originated fewer than 500 closed-end mortgage loans in each of the two preceding calendar years. New HMDA section 304(i)(2) provides that the requirements of HMDA section 304(b)(5) and (6) shall not apply with respect to open-end lines of credit of an insured depository institution or insured credit union if it originated fewer than 500 open-end lines of credit in each of the two preceding calendar years. Notwithstanding the new partial exemptions, new HMDA section 304(i)(3) provides that an insured depository institution must comply with HMDA section 304(b)(5) and (6) if it has received a rating of ''needs to improve record of meeting community credit needs'' during each of its two most recent examinations or a rating of ''substantial noncompliance in meeting community credit needs'' on its most recent examination under section 807(b)(2) of the CRA.[19]

On August 31, 2018, the Bureau issued an interpretive and procedural rule (2018 HMDA Rule) to implement and clarify the partial exemptions established by section 104(a) of the EGRRCPA and effectuate the purposes of the EGRRCPA and HMDA.[20] In the 2018 HMDA Rule, the Bureau stated that it anticipated that, at a later date, it would initiate a notice-and-comment rulemaking to incorporate the interpretations and procedures into Regulation C and further implement the EGRRCPA.

F. May 2019 Proposal and 2019 HMDA Rule

On May 2, 2019, the Bureau issued a notice of proposed rulemaking (May 2019 Proposal) relating to Regulation C's coverage thresholds and the EGRRCPA partial exemptions and requested public comment.[21] In the May 2019 Proposal, the Bureau proposed two alternatives to amend Regulation C to increase the current threshold of 25 closed-end mortgage loans for reporting data about closed-end mortgage loans so that

[10] *Id.* at 66128, 66256–58.

[11] *Id.* at 66148–50, 66309 (codified at 12 CFR 1003.2(g)(1)(v)). The 2015 HMDA Rule excludes certain transactions from the definition of covered loans, and those excluded transactions do not count towards the threshold. *Id.*

[12] *Id.* at 66173, 66310, 66322 (codified at 12 CFR 1003.3(c)(11) and (12)).

[13] Technical Corrections and Clarifying Amendments to the Home Mortgage Disclosure (Regulation C) October 2015 Final Rule, 82 FR 19142 (Apr. 25, 2017).

[14] Home Mortgage Disclosure (Regulation C) Temporary Increase in Institutional and Transactional Coverage Thresholds for Open-End Lines of Credit, 82 FR 33455 (July 20, 2017).

[15] Home Mortgage Disclosure (Regulation C), 82 FR 43088 (Sept. 13, 2017).

[16] *Id.* at 43095. The 2017 HMDA Rule also, among other things, replaced ''each'' with ''either'' in § 1003.3(c)(11) and (12) to correct a drafting error and to ensure that the exclusion provided in that section mirrors the loan-volume threshold for financial institutions in § 1003.2(g). *Id.* at 43100, 43102. Recognizing the significant systems and operations challenges needed to adjust to the revised regulation, the Bureau also issued a statement in December 2017 indicating that, for HMDA data collected in 2018 and reported in 2019, the Bureau did not intend to require data resubmission unless data errors were material. Among other things, the Bureau also indicated that it intended to engage in a rulemaking to reconsider various aspects of the 2015 HMDA Rule, such as the institutional and transactional coverage tests and the rule's discretionary data points. Bureau of Consumer Fin. Prot., ''Statement with Respect to HMDA Implementation'' (Dec. 21, 2017), *available at https://files.consumerfinance.gov/f/documents/cfpb_statement-with-respect-to-hmda-implementation_122017.pdf.* The Board, the Federal Deposit Insurance Corporation, the National Credit Union Administration, and the Office of the Comptroller of the Currency released similar statements relating to their supervisory examinations.

[17] Public Law 115–174, 132 Stat. 1296 (2018).

[18] For purposes of HMDA section 104, the EGRRCPA provides that the term ''insured credit union'' has the meaning given the term in section 101 of the Federal Credit Union Act, 12 U.S.C. 1752, and the term ''insured depository institution'' has the meaning given the term in section 3 of the Federal Deposit Insurance Act, 12 U.S.C. 1813.

[19] 12 U.S.C. 2906(b)(2).

[20] Partial Exemptions from the Requirements of the Home Mortgage Disclosure Act Under the Economic Growth, Regulatory Relief, and Consumer Protection Act (Regulation C), 83 FR 45325 (Sept. 7, 2018).

[21] Home Mortgage Disclosure (Regulation C), 84 FR 20972 (May 13, 2019). The Bureau also issued concurrently with the May 2019 Proposal an Advance Notice of Proposed Rulemaking (ANPR) to solicit comment, data, and information from the public about the data points that the 2015 HMDA Rule added to Regulation C or revised to require additional information and Regulation C's coverage of certain business- or commercial-purpose transactions. Home Mortgage Disclosure (Regulation C) Data Points and Coverage, 84 FR 20049 (May 8, 2019). The Bureau anticipates that it will issue a notice of proposed rulemaking later this year to follow up on the ANPR.

institutions originating fewer than either 50 closed-end mortgage loans or, alternatively, 100 closed-end mortgage loans in either of the two preceding calendar years would not have to report such data. The May 2019 Proposal proposed an effective date of January 1, 2020, for the amendment to the closed-end coverage threshold. The May 2019 Proposal also proposed to adjust the coverage threshold for reporting data about open-end lines of credit by (a) extending to January 1, 2022 the current temporary coverage threshold of 500 open-end lines of credit, and (b) setting the permanent coverage threshold at 200 open-end lines of credit upon the expiration of the proposed extension of the temporary coverage threshold. In the May 2019 Proposal, the Bureau also proposed to make changes to effectuate section 104(a) of the EGRRCPA, including incorporating into Regulation C the interpretations and procedures from the 2018 HMDA Rule to implement and clarify section 104(a).

The comment period for the May 2019 Proposal closed on June 12, 2019.[22] The Bureau received over 300 comments during the initial comment period from lenders, industry trade associations, consumer groups, consumers, members of Congress, and others. Among the comments received were a number of letters expressing concern that the national loan level dataset for 2018 and the Bureau's annual overview of residential mortgage lending based on that data (collectively, the 2018 HMDA Data [23]) would not be available until after the close of the comment period for the May 2019 Proposal. Stakeholders asked to submit comments on the May 2019 Proposal that reflect consideration of the 2018 HMDA Data. To allow for the submission of such comments, on July 31, 2019 the Bureau issued a notice to reopen the comment period on certain aspects of the proposal until October 15, 2019 (July 2019 Reopening Notice).[24] Specifically, the Bureau reopened the comment period with respect to: (1) The Bureau's proposed amendments to the permanent coverage threshold for closed-end mortgage loans, (2) the Bureau's proposed amendments to the permanent coverage threshold for open-end lines of credit, and (3) the appropriate effective date for any amendment to the closed-end coverage threshold.[25] The Bureau stated that, after reviewing the comments received by the October 15, 2019 deadline, it anticipated that it would issue in 2020 this separate final rule addressing the permanent thresholds for closed-end mortgage loans and open-end lines of credit.

The Bureau concluded that further comment was not necessary with respect to the other aspects of the May 2019 Proposal.[26] The Bureau therefore did not reopen the comment period with respect to the May 2019 Proposal's proposed two-year extension of the temporary coverage threshold for open-end lines of credit or the provisions in the May 2019 Proposal that would incorporate the EGRRCPA partial exemptions into Regulation C and further effectuate EGRRCPA section 104(a). The Bureau issued a final rule that finalized as proposed these aspects of the May 2019 Proposal on October 10, 2019 (2019 HMDA Rule).[27] The Bureau explained in the 2019 HMDA Rule that extending the current threshold of 500 open-end lines of credit for an additional two years would allow the Bureau to consider fully the appropriate level for the permanent open-end coverage threshold for data collected beginning January 1, 2022, after reviewing additional comments relating to that aspect of the May 2019 Proposal. The Bureau also stated that such an extension would ensure that any institutions that are covered under the new permanent open-end coverage threshold would have until January 1, 2022, to comply.

G. HMDA Coverage Under Current Regulation C

The Bureau's estimates of HMDA coverage and the sources used in deriving those estimates are explained in detail in the Bureau's analysis under Dodd-Frank Act section 1022(b) in part VII below.[28] The Bureau estimates that currently there are about 4,860 financial institutions required to report their closed-end mortgage loans and applications under HMDA. The Bureau estimates that approximately 4,120 of these current reporters are depository institutions and approximately 740 are nondepository institutions. The Bureau estimates that together these financial institutions originated about 6.3 million closed-end mortgage loans in calendar year 2018. The Bureau estimates that among the 4,860 financial institutions that are currently required to report closed-end mortgage loans under HMDA, about 3,250 insured depository institutions and insured credit unions are partially exempt for closed-end mortgage loans under the EGRRCPA, and thus are not required to report a subset of the data points currently required by Regulation C for these transactions.

As explained in more detail in part VII.E.3 and table 4 below, under the current temporary threshold of 500 open-end lines of credit, the Bureau estimates that there are about 333 financial institutions required under HMDA to report about 1.23 million open-end lines of credit. Of these institutions, the Bureau estimates that approximately 318 are depository institutions and approximately 15 are nondepository institutions. The Bureau estimates that none of these 333 institutions are partially exempt under the EGRRCPA.

Absent this final rule, if the open-end coverage threshold were to adjust to 100 on January 1, 2022, the Bureau estimates that the number of reporters would be about 1,014, who in total originate about 1.41 million open-end lines of credit. The Bureau estimates that approximately 972 of these open-end reporters would be depository institutions and approximately 42 would be nondepository institutions. The Bureau estimates that, among the 1,014 financial institutions that would be required to report open-end lines of credit under a threshold of 100, about 595 insured depository institutions and insured credit unions are partially exempt for open-end lines of credit under the EGRRCPA, and thus are not

[22] A separate comment period related to the Paperwork Reduction Act closed on July 12, 2019. 84 FR 20972 (May 13, 2019).

[23] This document uses ''2018 HMDA Data'' to refer to the publicly available national loan level dataset for 2018 and the Bureau's annual overview of residential mortgage lending, and ''2018 HMDA data'' to refer to the HMDA data submitted for collection year 2018.

[24] *See* Home Mortgage Disclosure (Regulation C); Reopening of Comment Period, 84 FR 37804 (Aug. 2, 2019).

[25] *Id.* at 37806.

[26] *Id.*

[27] Home Mortgage Disclosure (Regulation C), 84 FR 57946 (Oct. 29, 2019).

[28] *See infra* part VII.D.1. All coverage numbers provided in this document are estimates based on available data, as explained in part VII below. Due to rounding there may be some minor discrepancies within the estimates provided. As discussed further in part VII below, the Bureau's analyses in the May 2019 Proposal were based on HMDA data collected in 2016 and 2017 and other sources. In part VII of this final rule, the Bureau has supplemented the analyses from the May 2019 Proposal with the 2018 HMDA data. *See infra* part VII.E.2 & VII.E.3. In the May 2019 Proposal, the Bureau estimated that there were about 4,960 financial institutions required to report their closed-end mortgage loans and applications under HMDA, with about 4,263 of those reporters being depository institutions and about 697 being nondepository institutions. The Bureau estimated that together, these financial institutions originated about 7 million closed-end mortgage loans in calendar year 2017. The Bureau also estimated that among the estimated 4,960 closed-end reporters, about 3,300 insured depository institutions and insured credit unions were eligible for a partial exemption under the EGRRCPA. The estimates in this final rule differ slightly from those in the May 2019 Proposal due to the supplementation of the analyses with 2018 HMDA data.

required to report a subset of the data points currently required by Regulation C for these transactions. Additional information on the Bureau's estimates for open-end reporting, including the Bureau's estimates at the permanent threshold of 200 lines of credit, is provided in the section-by-section analysis of § 1003.2(g) and part VII below.

III. Summary of the Rulemaking Process

On May 2, 2019, the Bureau issued the May 2019 Proposal, which was published in the **Federal Register** on May 13, 2019.[29] As explained in part II.F above, the comment period on the May 2019 Proposal closed on June 12, 2019, and the Bureau subsequently reopened the comment period with respect to certain aspects of the May 2019 Proposal until October 15, 2019.[30] In total, the Bureau received over 700 comments in response to the May 2019 Proposal and the July 2019 Reopening Notice from lenders, industry trade associations, consumer groups, consumers, and others.[31] As discussed in more detail below, the Bureau has considered the comments received both during the initial comment period and in response to the July 2019 Reopening Notice in adopting this final rule.

IV. Legal Authority

The Bureau is issuing this final rule pursuant to its authority under the Dodd-Frank Act and HMDA. Section 1061 of the Dodd-Frank Act transferred to the Bureau the ''consumer financial protection functions'' previously vested in certain other Federal agencies, including the Board.[32] The term ''consumer financial protection function'' is defined to include ''all authority to prescribe rules or issue orders or guidelines pursuant to any Federal consumer financial law, including performing appropriate functions to promulgate and review such rules, orders, and guidelines.'' [33] Section 1022(b)(1) of the Dodd-Frank Act authorizes the Bureau's Director to prescribe rules ''as may be necessary or appropriate to enable the Bureau to administer and carry out the purposes and objectives of the Federal consumer financial laws, and to prevent evasions thereof.'' [34] Both HMDA and title X of the Dodd-Frank Act are Federal consumer financial laws.[35] Accordingly, the Bureau has authority to issue regulations to implement HMDA.

HMDA section 305(a) broadly authorizes the Bureau to prescribe such regulations as may be necessary to carry out HMDA's purposes.[36] These regulations may include classifications, differentiations, or other provisions, and may provide for such adjustments and exceptions for any class of transactions, as in the judgment of the Bureau are necessary and proper to effectuate the purposes of HMDA, and prevent circumvention or evasion thereof, or to facilitate compliance therewith.[37]

V. Section-by-Section Analysis

Section 1003.2 Definitions

2(g) Financial Institution

Regulation C requires financial institutions to report HMDA data. Section 1003.2(g) defines financial institution for purposes of Regulation C and sets forth Regulation C's institutional coverage criteria for depository financial institutions and nondepository financial institutions.[38] In the 2015 HMDA Rule, the Bureau adjusted the institutional coverage criteria under Regulation C so that depository institutions and nondepository institutions are required to report HMDA data if they: (1) Originated at least 25 closed-end mortgage loans or 100 open-end lines of credit in each of the two preceding calendar years, and (2) meet all of the other applicable criteria for reporting. In the 2017 HMDA Rule, the Bureau amended § 1003.2(g) and related commentary to increase temporarily from 100 to 500 the number of open-end originations required to trigger reporting responsibilities.[39] In the May 2019 Proposal, the Bureau proposed (1) to amend §§ 1003.2(g)(1)(v)(A) and (g)(2)(ii)(A) and 1003.3(c)(11) and related commentary to raise the closed-end coverage threshold to either 50 or 100 closed-end mortgage loans, and (2) to amend §§ 1003.2(g)(1)(v)(B) and (g)(2)(ii)(B) and 1003.3(c)(12) and related commentary to extend to January 1, 2022, the current temporary open-end coverage threshold of 500 open-end lines of credit and then to set the threshold permanently at 200 open-end lines of credit beginning in calendar year 2022. In the 2019 HMDA Rule, as discussed in part II.F above, the Bureau finalized the proposed amendments relating to the two-year extension of the temporary open-end coverage threshold. The Bureau stated at that time that it anticipated that it would issue a separate final rule in 2020 addressing the permanent thresholds for closed-end mortgage loans and open-end lines of credit.[40] For the reasons discussed below, the Bureau is raising the closed-end coverage threshold to 100, effective July 1, 2020, and is finalizing the proposed permanent open-end coverage threshold of 200, effective January 1, 2022, upon expiration of the current temporary open-end coverage threshold of 500.[41]

Legal Authority for Changes to § 1003.2(g)

In the 2015 HMDA Rule, the Bureau adopted the thresholds for certain depository institutions in § 1003.2(g)(1) pursuant to its authority under section 305(a) of HMDA to provide for such adjustments and exceptions for any

[29] Home Mortgage Disclosure (Regulation C), 84 FR 20972 (May 13, 2019).

[30] Home Mortgage Disclosure (Regulation C); Reopening of Comment Period, 84 FR 37804 (Aug. 2, 2019).

[31] A large number of consumer groups, civil rights groups, and other organizations stated in a joint comment letter in response to the July 2019 Reopening Notice that, because the 2018 HMDA Data were released in late August 2019, the reopened comment period did not provide sufficient time for the public to analyze the proposed changes prior to October 15, 2019. These commenters stated further that the public was not provided a meaningful opportunity to comment on the May 2019 Proposal and that the Bureau would not have the benefit of fully informed comments that took into consideration the 2018 HMDA Data. The Bureau determines that additional time to comment on the aspects of the May 2019 Proposal addressed in this final rule is not necessary. The Bureau believes the more than 45-day period between the release of the 2018 HMDA Data and the close of the reopened comment period on October 15, 2019, provided interested persons sufficient time to meaningfully review the proposed changes relating to the permanent open-end and closed-end thresholds and provide comment informed by the 2018 HMDA Data. Regarding commenters' separate concerns over the Bureau's dissemination of the data, the Bureau made available with the 2018 HMDA Data a HMDA data browser that facilitates analysis in spreadsheet software, such as Excel, and allows users to filter the national loan-level data to create summary tables and custom datasets. The HMDA data browser allows users to, for example, create summary tables that can be used to show which institutions are active in a particular Metropolitan Statistical Area (MSA), state, or county. Users can develop some understanding of the effect of various loan-volume thresholds, for individual institutions, by analyzing the publicly available modified loan/application register data or, for all institutions, by analyzing the publicly available national loan-level dataset.

[32] 12 U.S.C. 5581. Section 1094 of the Dodd-Frank Act also replaced the term ''Board'' with ''Bureau'' in most places in HMDA. 12 U.S.C. 2803 *et seq.*

[33] 12 U.S.C. 5581(a)(1)(A).

[34] 12 U.S.C. 5512(b)(1).

[35] Dodd-Frank Act section 1002(14), 12 U.S.C. 5481(14) (defining ''Federal consumer financial law'' to include the ''enumerated consumer laws'' and the provisions of title X of the Dodd-Frank Act); Dodd-Frank Act section 1002(12), 12 U.S.C. 5481(12) (defining ''enumerated consumer laws'' to include HMDA).

[36] 12 U.S.C. 2804(a).

[37] *Id.*

[38] 12 CFR 1003.2(g)(1) (definition of depository financial institution); 1003.2(g)(2) (definition of nondepository financial institution).

[39] 82 FR 43088, 43095 (Sept. 13, 2017).

[40] 84 FR 57946, 57949 (Oct. 29, 2019).

[41] For discussion of the effective dates, see part VI.

class of transactions that in the judgment of the Bureau are necessary and proper to effectuate the purposes of HMDA. Pursuant to section 305(a) of HMDA, for the reasons given in the 2015 HMDA Rule, the Bureau found that the exception in § 1003.2(g)(1) is necessary and proper to effectuate the purposes of and facilitate compliance with HMDA. The Bureau found that the provision, by reducing burden on financial institutions and establishing a consistent loan-volume test applicable to all financial institutions, would facilitate compliance with HMDA's requirements.[42] Additionally, as discussed in the 2015 HMDA Rule, the Bureau adopted the thresholds for certain nondepository institutions in § 1003.2(g)(2) pursuant to its interpretation of HMDA sections 303(3)(B) and 303(5), which require persons other than banks, savings associations, and credit unions that are ''engaged for profit in the business of mortgage lending'' to report HMDA data. The Bureau stated that it interprets these provisions, as the Board also did, to evince the intent to exclude from coverage institutions that make a relatively small number of mortgage loans.[43] Pursuant to its authority under HMDA section 305(a), and for the reasons discussed below, the Bureau believes that the final rule's amendments to the thresholds in § 1003.2(g)(1) and (2) are necessary and proper to effectuate the purposes of HMDA and facilitate compliance with HMDA by reducing burden and establishing a consistent loan-volume test, while still providing significant market coverage.[44]

2(g)(1) Depository Financial Institution

2(g)(1)(v)

2(g)(1)(v)(A)

Section 1003.2(g) defines financial institution for purposes of Regulation C and conditions Regulation C's institutional coverage, in part, on the institution's closed-end mortgage loan origination volume. In the 2015 HMDA Rule, the Bureau added the threshold of 25 closed-end mortgage loans to the pre-existing regulatory coverage scheme for depository institutions.[45] In the May 2019 Proposal, the Bureau proposed to amend § 1003.2(g)(1)(v)(A) and related commentary to increase the closed-end threshold for depository institutions from 25 to 50 or, alternatively, 100 closed-end mortgage loans. For the reasons discussed below, the Bureau is now amending § 1003.2(g)(1)(v)(A) and related commentary to raise the threshold to 100 closed-end mortgage loans.[46]

Background on Closed-End Mortgage Loan Threshold for Institutional Coverage of Depository Institutions

HMDA and its implementing regulation, Regulation C, require certain depository institutions (banks, savings associations, and credit unions) to report data about originations and purchases of mortgage loans, as well as mortgage loan applications that do not result in originations (for example, applications that are denied or withdrawn). In adopting the threshold of 25 closed-end mortgage loans in the 2015 HMDA Rule, the Bureau stated that it believed that the institutional coverage criteria should balance the burden on financial institutions of reporting HMDA data against the value of the data reported and that a threshold should be set that did not impair HMDA's ability to achieve its purposes but also did not impose burden on institutions if their data are of limited value.[47] The Bureau also stated that the closed-end threshold of 25 would meaningfully reduce burden by relieving an estimated 1,400 depository institutions, or 22 percent of depository institutions that previously reported HMDA data, of their obligations to report HMDA data on closed-end mortgage loans.[48] The Bureau acknowledged that it would be possible to maintain reporting of a significant percentage of the national mortgage market with a closed-end threshold set higher than 25 loans annually and that data reported by some institutions that would satisfy the threshold of 25 closed-end mortgage loans may not be as useful for statistical analysis as data reported by institutions with much higher loan volumes.[49] However, the Bureau determined that a higher closed-end threshold would have a material negative impact on the availability of data about patterns and trends at the local level and the data about local communities are essential to achieve HMDA's purposes.[50] The Bureau concluded that, if it were to set the closed-end threshold higher than 25, the resulting loss of data at the local level would substantially impede the public's and public officials' ability to understand access to credit in their communities.[51]

However, after issuing the 2015 HMDA Rule and the 2017 HMDA Rule, the Bureau heard concerns that lower-volume institutions continue to experience significant burden with the threshold set at 25 closed-end mortgage loans.[52] For example, several depository institutions recommended that the Bureau use its exemption authority to increase the closed-end loan threshold and stated that the costs of HMDA reporting and its impact on the operations of lower-volume financial institutions do not justify the small amount of data such institutions would report.[53] In light of the concerns expressed by industry stakeholders regarding the considerable burden associated with reporting the new data points on closed-end mortgage loans required by the 2015 HMDA Rule, in the May 2019 Proposal the Bureau proposed to increase the closed-end threshold for institutions to ensure that it appropriately balances the benefits of the HMDA data reported by lower-volume institutions in furthering HMDA's purposes with the burden on

[42] 80 FR 66128, 66150 (Oct. 28, 2015).

[43] *Id.* at 66153.

[44] A State attorney general suggested in its comments that increasing the thresholds exceeds the Bureau's legal authority, but as discussed above, the Bureau is adopting the increased thresholds based on its authority under section 305(a) of HMDA.

[45] 80 FR 66128, 66129 (Oct. 28, 2015). Prior to the 2015 HMDA Rule, a bank, savings association, or credit union was covered under Regulation C if: (1) On the preceding December 31, it satisfied an asset-size threshold; (2) on the preceding December 31, it had a home or branch office in an MSA; (3) during the previous calendar year, it originated at least one home purchase loan or refinancing of a home purchase loan secured by a first lien on a one- to four-unit dwelling; and (4) the institution is federally insured or regulated, or the mortgage loan referred to in item (3) was insured, guaranteed, or supplemented by a Federal agency or intended for sale to the Federal National Mortgage Association or the Federal Home Loan Mortgage Corporation. 12 CFR 1003.2 (2016).

[46] In addition to finalizing changes that the Bureau proposed to comment 2(g)–1 and changes related to optional reporting that are discussed below, the final rule makes minor changes to comment 2(g)–1 to update the years and loan-volumes in an example that illustrates how the closed-end mortgage loan threshold works.

[47] 80 FR 66128, 66147 (Oct. 28, 2015).

[48] *Id.* at 66148, 66277.

[49] *Id.* at 66147.

[50] *Id.*

[51] *Id.* at 66148.

[52] The Bureau temporarily raised the threshold for open-end lines of credit in the 2017 HMDA Rule because of concerns based on new information that the estimates the Bureau used in the 2015 HMDA Rule may have understated the burden that open-end reporting would impose on smaller institutions if they were required to begin reporting on January 1, 2018. However, the Bureau declined to raise the threshold for closed-end mortgage loans at that time and stated that, in developing the 2015 HMDA Rule, it had robust data to make a determination about the number of transactions that would be reported at the threshold of 25 closed-end mortgage loans as well as the one-time and ongoing costs to industry. 82 FR 43088, 43095–96 (Sept. 13, 2017).

[53] In the May 2019 Proposal, the Bureau stated that it received this recommendation in response to the Bureau's 2018 Request for Information Regarding the Bureau's Adopted Regulations and New Rulemaking Authorities (RFI) although the 2015 HMDA Rule was outside the scope of the RFI. *See* 84 FR 20972, 20976 (May 13, 2019).

such institutions associated with reporting closed-end data. The Bureau stated in the proposal that increasing the closed-end threshold may provide meaningful burden relief for lower-volume depository institutions without reducing substantially the data reported under HMDA. The Bureau sought comments on how the proposed increase to the closed-end threshold would affect the number of depository institutions required to report data on closed-end mortgage loans, the significance of the data that would not be available for achieving HMDA's purposes as a result of the proposed increase, and the reduction in burden that would result from the proposed increase for depository institutions that would not be required to report.

Comments Received on Closed-End Threshold for Institutional Coverage of Depository Institutions

The Bureau received many comments regarding the proposed alternatives for increasing the closed-end threshold from 25 to 50 or, alternatively, 100 in proposed § 1003.2(g)(1)(v)(A). Except for comments related to the EGRRCPA, commenters typically did not distinguish between their recommended closed-end threshold for depository institutions under § 1003.2(g)(1)(v)(A) and their recommended closed-end threshold for nondepository institutions under § 1003.2(g)(2)(ii)(A).

Many commenters, including most financial institutions and national and State trade associations that commented, supported increasing the closed-end threshold. Most of these commenters discussed the burden of collecting and reporting HMDA data, and despite acknowledging the importance of HMDA data, stated that the cost of complying with regulations has affected their ability to serve their communities. Many industry commenters stated that the burden of complying with HMDA requirements is exacerbated in smaller financial institutions due to fewer staff and a lack of automated processes. A number of small financial institutions stated that they have only a few employees who work in mortgage lending and that these employees spend a considerable amount of time on HMDA compliance, including collecting and entering HMDA data into the appropriate software system and reviewing the data for accuracy. One national trade association added that many small financial institutions operate in geographic areas with shortages of compliance professionals. Several industry commenters also noted that the economies of scale that larger financial institutions can leverage are generally not available to small financial institutions. Many small financial institutions stated that, if the Bureau increased the closed-end threshold and thus excluded them from HMDA's coverage, the significant burden relief would allow their staff to focus on serving customers.

A national trade association stated that a significant number of small financial institutions limit or no longer offer specific mortgage products due to the increased regulatory burden and legal risks associated with such loans. This commenter stated that certain institutions manage their mortgage lending to stay below the threshold for HMDA reporting, which ultimately leaves customers with fewer lending options, and suggested that an increase in the closed-end threshold could increase the flow of credit by small banks into their communities. For example, one small financial institution suggested that, if it did not have to collect HMDA data, the resulting decrease in compliance costs would allow it to maintain a program that provides mortgages to low-to-moderate income families.

Several industry commenters stated that the loss of HMDA data as a result of an increase in the closed-end threshold would not impact the ability to identify potentially discriminatory lending or areas in need of public sector investment. One national trade association stated that institutions that would qualify for the exclusion under the thresholds proposed by the Bureau were extremely small market participants with limited loan volumes and that data on their lending patterns could be obtained through the examination process. This commenter also suggested that any type of fair lending peer comparisons using the HMDA data could still be accurate because, under the proposed threshold of 100, at least 96 percent of total originations would be retained. Many small financial institutions stated that, in their fair lending exams, their regulators have relied on HMDA data, but also on transaction testing data and staff interviews, partly because of the limited number of mortgage applications these institutions receive. These commenters stated further that their regulators also retain full access to their lending files and data needed for their fair lending assessment. A number of commenters, including many small financial institutions and a State trade association, stated that small financial institutions are eligible for partial exemptions under the EGRRCPA and thus are already exempt from reporting much of the data on their credit decisions that would signal lending disparities, such as pricing information and credit scores. The State trade association further stated that examiners already need to review such institutions' files, rather than relying on their HMDA data, to identify potentially discriminatory lending patterns. A State trade association expressed the belief that, due to budget constraints for some local governments and housing authorities, HMDA data are not considered in the distribution of public sector investments in certain areas. Moreover, this commenter stated that, in areas where government authorities do consider HMDA data in making public investment decisions, HMDA data from lower-volume institutions make up a small percentage of the overall lending data within the area and thus do not impact such investment decisions.

Relying on the reasons described above, most of the commenters supporting the proposed increase to the closed-end threshold stated that they preferred the proposed threshold of 100 closed-end mortgage loans over the proposed threshold of 50 closed-end mortgage loans. In some cases, commenters urged the Bureau to consider increasing the closed-end threshold even higher, such as to 250, 500, or 1,000. A national trade association recommended increasing the closed-end threshold to 500 to harmonize HMDA's coverage requirements with the threshold for the EGRRCPA partial exemptions. A trade association and some small financial institutions suggested that the Bureau increase the threshold to 1,000 closed-end mortgage loans, expressing the belief that the Bureau's proposal did not go far enough to distinguish small lending institutions from larger institutions in the mortgage market. The trade association reasoned that increasing the threshold to at least 1,000 closed-end mortgage loans would meaningfully reduce regulatory burden associated with HMDA compliance and allow institutions to direct their cost savings towards improving customer service, increasing consumer-friendly products, and continuing to invest in their communities.

Other commenters, including many community organizations, consumer advocates, research organizations, and individuals, opposed the Bureau's proposal to increase the closed-end threshold. These commenters stated that an increase to the closed-end threshold, which would result in a decrease in HMDA data, would imperil HMDA's purpose of assessing whether financial institutions are meeting the housing

needs of their communities. For example, one research organization stated that robust, quality data are critical to the work of regulators and community reinvestment advocates in assessing how well institutions are serving their communities. One commenter stated that lenders rely on HMDA data for internal fair lending and community reinvestment compliance efforts and to assess their performance relative to that of their peers and competitors. A comment letter from 19 U.S. Senators stated that the Bureau's proposal ignores existing exemptions that already reduce the usefulness of HMDA data in many communities. These Senators pointed out that the 2015 HMDA Rule exempted 22 percent of depository institutions that had previously been required to report HMDA data, which resulted in a significant loss of data in certain census tracts. They also noted that an underlying purpose of HMDA is to show how institutions are serving local communities and stated that, even if the loss of data from smaller-volume institutions would be limited when compared to the overall market, the loss of the data would have a real and meaningful impact for residents of affected communities. In a joint comment letter, a large number of consumer groups, civil rights groups, and other organizations expressed a similar concern that increasing the threshold would result in a large loss of HMDA reporting that would otherwise provide a view of lending trends in underserved areas.

Many consumer groups, civil rights groups, and other organizations also discussed the importance of HMDA data for transparency and accountability, noting that the public visibility of HMDA data has motivated financial institutions to increase lending to traditionally underserved borrowers and communities. They expressed concern that the smaller institutions that would no longer be required to report closed-end data at the proposed higher thresholds disproportionately lend in underserved neighborhoods and that the proposed threshold increase would result in a more notable decrease in closed-end data for distressed urban areas, rural areas, tribal areas, communities of color, and neighborhoods that have a high number of immigrants. These commenters asserted that for decades the public has used HMDA data to uncover and address redlining and other fair lending and fair housing violations and stated that an increase in the threshold would make identifying such practices more difficult. A consumer advocacy organization stated that lenders offering unfavorable and unsustainable loan terms and refinance loans in the period just before the financial crisis disproportionally targeted certain groups. Many commenters also stated that an increase in the closed-end threshold would impact the public's ability to evaluate whether public investments are successful in revitalizing struggling areas. For example, one community group noted that the loss of HMDA data from banks and credit unions operating in rural towns and communities would result in less information about where capital is being deployed in those areas.

Many commenters who were opposed to increasing the closed-end threshold pointed out the impact that an increase to the closed-end threshold would have on the work of Federal and State agencies. They stated that raising the thresholds would compromise enforcement work against unfair and deceptive lending because there would be less data available to monitor such activity. Similarly, commenters stated that examinations pursuant to the Community Reinvestment Act (CRA) would become more burdensome because examiners would likely need to be onsite to review data rather than using publicly available HMDA data. A State attorney general commenter suggested that under the Bureau's proposal, major lenders would be exempt from HMDA reporting and that the lack of data from such lenders would affect its ability to ensure that all of its residents are able to access affordable credit free of discrimination. In addition, this commenter stated that the proposed closed-end threshold increase would all but eliminate its ability to enforce fair lending laws in ''hyper-localized'' markets in rural areas because small, local lenders are disproportionately represented in rural areas (the commenter did not define the term ''hyper-localized,'' but the Bureau understands this term as referring to markets that are limited to a small geographic area).

Several commenters also expressed concerns about the impact that an increase in the closed-end threshold would have on visibility into specific loan products, such as loans for multifamily housing and manufactured housing. For example, a State attorney general expressed concerns that a threshold higher than the current threshold of 25 would limit data reported on multifamily dwellings that provide a significant source of affordable housing in urban areas across the State. Another commenter opposed an increase to the closed-end threshold because of concerns that it would decrease visibility into manufactured housing loans, reasoning that there are a small number of lenders that make such loans.

Many commenters who opposed an increase in the closed-end threshold also stated that the cost savings that would result from excluding lenders from HMDA reporting would be modest. These commenters asserted that the burden of HMDA reporting is not so significant as to make up for the loss of data that would otherwise be available at the current threshold of 25 closed-end mortgage loans for the public and regulators to monitor fair lending compliance. These commenters stated further that the estimates of potential cost savings provided by the Bureau in the proposal were too high and that the cost of HMDA reporting is low. First, they stated that most of the lenders that would be excluded under the Bureau's proposed rule are already exempt from reporting many of the new HMDA data points because they qualify for partial exemptions under the EGRRCPA and would therefore be reporting data that lenders have been reporting for decades. Second, these commenters noted that much of the data reportable under HMDA must be collected for other rules, including the TILA–RESPA Integrated Disclosure and Ability-to-Repay/Qualified Mortgage rules, and ordinary underwriting standards. Finally, these commenters stated that HMDA data should be collected as a matter of sound banking practices and asserted that reporting the data is unlikely to require substantial resources given modern technological advancements.

Final Rule

Pursuant to its authority under HMDA section 305(a) as discussed above, the Bureau is finalizing the closed-end threshold for depository institutions at 100 in § 1003.2(g)(1)(v)(A). As discussed below, the Bureau believes that increasing the closed-end threshold to 100 will provide meaningful burden relief for lower-volume depository institutions while maintaining reporting sufficient to achieve HMDA's purposes.

Since the 2015 HMDA Rule was issued, a few developments have affected the Bureau's analyses of the costs and benefits associated with the closed-end threshold. The Bureau has gathered extensive information regarding stakeholders' experience with the 2015 HMDA Rule, through comments received in this rulemaking and other feedback. As stated above, the Bureau has heard that financial institutions have encountered

significant burdens in complying with the rule, and the Bureau is particularly concerned about the increased burdens faced by smaller institutions. Additionally, the Bureau now has access to HMDA data from 2018, which was the first year that financial institutions collected data under the 2015 HMDA Rule, and has used these data in updating and generating the estimates provided in this final rule. With the benefit of this additional information about the 2015 HMDA Rule, and the new data to supplement the Bureau's analyses, the Bureau is now in a better position to assess both the benefits and burdens of the reporting required under the 2015 HMDA Rule.

Another development since the 2015 HMDA Rule is the enactment of the EGRRCPA, which created partial exemptions from HMDA's requirements that certain insured depository institutions and insured credit unions may now use.[54] The partial exemption for closed-end mortgage loans under the EGRRCPA relieves certain insured depository institutions and insured credit unions that originated fewer than 500 closed-end mortgage loans in each of the two preceding calendar years of the obligation to report many of the data points generally required by Regulation C.[55] While the EGRRCPA relieves burden for some depository institutions, it does not relieve smaller depository institutions from the burdens of reporting entirely.

The Bureau has considered the appropriate closed-end threshold in light of these developments and the comments received. On balance, the Bureau determines that the threshold of 100 closed-end mortgage loans provides sufficient information on closed-end mortgage lending to serve HMDA's purposes, while appropriately reducing ongoing costs that smaller institutions are incurring under the current threshold. These considerations are discussed in turn below, and additional explanation of the Bureau's cost estimates is provided in the Bureau's analysis under Dodd-Frank Act section 1022(b) in part VII.E.2 below.

Effect on Market Coverage

For this final rule, the Bureau reviewed multiple data sources, including recent HMDA data[56] and Reports of Condition and Income (Call Reports), and developed estimates for the two thresholds the Bureau proposed in the alternative, 50 and 100, as well as thresholds of 250 and 500, which many commenters suggested the Bureau consider. The Bureau notes that many of the estimates provided in this final rule differ slightly from the initial estimates provided in the May 2019 Proposal. As discussed below in part VII.E.2, the estimates in this final rule update the initial estimates provided in the May 2019 Proposal with the 2018 HMDA data, which were not available at the time the Bureau developed the May 2019 Proposal. For the May 2019 Proposal, the Bureau used data from 2016 and 2017 with a two-year look-back period covering calendar years 2016 and 2017 to estimate potential reporters and projected the lending activities of financial institutions using their 2017 data as proxies. In generating the updated estimates provided in this final rule, the Bureau has used data from 2017 and 2018 with a two-year look-back period covering calendar years 2017 and 2018 to estimate potential reporters and has projected the lending activities of financial institutions using their 2018 data as proxies. In addition, for the estimates provided in the May 2019 Proposal and in this final rule, the Bureau restricted the projected reporters to only those that actually reported data in the most recent year of HMDA data considered (2017 for the May 2019 Proposal and 2018 for this final rule).[57]

The estimates below compare coverage under these thresholds to coverage under the current threshold of 25 closed-end mortgage loans. The estimated effect that increasing the threshold from 25 closed-end mortgage loans to various higher thresholds would have on the overall HMDA data, local-level HMDA data, and specific loan products reported are discussed in turn below.

Effect on covered depository institutions and reportable originations. For this final rule, the Bureau has considered the impact that the two alternative proposed thresholds and other possible thresholds would have on the number of depository institutions that would report HMDA data and how many originations they would report.[58] The Bureau estimates that if the closed-end threshold were increased from 25 to 50, approximately 3,400 out of approximately 4,120 depository institutions covered under the current threshold of 25 (or approximately 85 percent) would continue to be required to report HMDA data on closed-end mortgage loans. Further, the Bureau estimates that if the threshold were increased from 25 to 50, approximately 98.9 percent or approximately 2.89 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria would continue to be reported.[59]

The Bureau estimates that with the closed-end threshold set at 100 under the final rule, approximately 2,480 out of approximately 4,120 depository institutions covered under the current threshold of 25 (or approximately 60 percent) will continue to be required to report HMDA data on closed-end mortgage loans. Further, the Bureau estimates that when the final rule increases the closed-end threshold from 25 to 100 loans, approximately 96 percent or approximately 2.79 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria will continue to be reported.[60]

[54] Public Law 115–174, 132 Stat. 1296 (2018).

[55] *See* 84 FR 57946 (Oct. 29, 2019).

[56] The Bureau stated in the May 2019 Proposal that it intended to review the 2018 HMDA data more closely in connection with this rulemaking once the 2018 submissions were more complete. The Bureau released the 2018 HMDA Data including the two data point articles on August 30, 2019, and reopened the comment period until October 15, 2019, to give commenters an opportunity to comment on the 2018 HMDA Data. The estimates reflected in this final rule are based on the HMDA data collected in 2017 and 2018 as well as other sources.

[57] The Bureau recognizes that the coverage estimates generated using this restriction may omit certain financial institutions that should have reported but did not report in the most recent HMDA reporting year. However, the Bureau applied this restriction to ensure that institutions included in its coverage estimates are in fact financial institutions for purposes of Regulation C because it recognizes that institutions might not meet the Regulation C definition of financial institution for reasons that are not evident in the data sources that it utilized.

[58] The estimates for coverage and reportable originations described in this section cover only depository institutions. Estimates for coverage of nondepository institutions and reportable originations of nondepository institutions are described in the section-by-section analysis of § 1003.2(g)(2)(ii)(A) below. For estimates that are comprehensive of depository and nondepository institutions, see part VII.E.2 below.

[59] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 50, about 3,518 out of about 4,263 depository institutions covered under the current threshold of 25 (or approximately 83 percent) would continue to report HMDA data on closed-end mortgage loans, and approximately 99 percent or approximately 3.54 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria would continue to be reported. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[60] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 100, about 2,581 out of about 4,263 depository

Continued

The Bureau also generated estimates for closed-end thresholds higher than those that the Bureau proposed. These estimates indicate that the decrease in the number of depository institutions that would be required to report HMDA data and the resulting decrease in the HMDA data that would be reported becomes more pronounced at thresholds higher than 100. For example, if the closed-end threshold were set at 250, the Bureau estimates that approximately 1,340 out of approximately 4,120 depository institutions covered under the current threshold of 25 (or approximately 32 percent) would continue to be required to report HMDA data on closed-end mortgage loans. Further, the Bureau estimates that, if the threshold were set at 250 closed-end mortgage loans, approximately 89 percent or approximately 2.57 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria would continue to be reported.[61]

The Bureau estimates that if the closed-end threshold were set at 500, approximately 720 out of approximately 4,120 depository institutions covered under the current threshold of 25 (or approximately 18 percent) would continue to be required to report HMDA data on closed-end mortgage loans. Further, the Bureau estimates that, if the threshold were set at 500, approximately 81 percent or approximately 2.34 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria would continue to be reported.[62]

As described above, many commenters opposed increasing the closed-end threshold because of concerns that there would be less data with which to further HMDA's statutory purposes. While the Bureau recognizes that the increase in the threshold to 100 closed-end mortgage loans will reduce market coverage compared to the current threshold of 25, the Bureau estimates that information covering approximately 96 percent of loans currently reported will still be available to further HMDA's statutory purposes. The Bureau believes that the small amount of HMDA data obtained from lower-volume depository institutions does not justify the costs imposed on those institutions to comply with HMDA data reporting requirements.

Although a commenter suggested the Bureau increase the closed-end threshold to 500 to harmonize the thresholds with the EGRRCPA provisions, the Bureau determines that it is not appropriate to set the closed-end threshold at 500. Doing so would provide a complete exclusion from reporting all closed-end data for institutions below the threshold of 500, even though Congress opted to provide only a partial exemption at the threshold of 500, and would extend that complete exclusion to institutions that Congress did not include in even the partial exemption. The EGRRCPA partial exemption already relieves most lenders originating fewer than 500 closed-end loans in each of the two preceding calendar years from the requirement to report many data points associated with their closed-end transactions.[63] Providing a complete exclusion at 500 closed-end mortgage loans would exclude visibility into approximately 82 percent of institutions covered under the current threshold of 25 closed-end mortgage loans, which would result in a significant loss of coverage in closed-end lending and negatively impact the utility of HMDA data.

Effect on HMDA data at the local level. For the proposal and this final rule, the Bureau reviewed estimates at varying closed-end thresholds to examine the potential effect on available data at the census tract level. The Bureau's estimates of the effect on reportable HMDA data at the census tract level comprise both depository institutions and nondepository institutions. The Bureau estimates that, if the closed-end threshold were raised from 25 to 50, approximately 74,300 out of the approximately 74,600 total census tracts in which HMDA data are currently reported, or over 99 percent, would retain more than 80 percent of reportable HMDA data, relative to the current threshold. The Bureau estimates there would be a decrease of at least 20 percent of reportable HMDA data on closed-end mortgage loans relative to the current threshold in approximately 300 out of approximately 74,600 total census tracts in which HMDA data are currently reported, or less than one-half of 1 percent. With respect to low-to-moderate income census tracts, if the closed-end threshold were raised from 25 to 50, the Bureau estimates that, relative to the current threshold of 25, over 99 percent of low-moderate income census tracts would retain more than 80 percent of reportable HMDA data, and there would be at least a 20 percent decrease in reportable HMDA data on closed-end mortgage loans in less than 1 percent of such tracts. In addition, the Bureau examined the effects on rural census tracts and estimates that, relative to the current threshold of 25, more than 98 percent of rural tracts would retain more than 80 percent of reportable HMDA data, and there would be at least a 20 percent decrease in reportable HMDA data in just over 1 percent of rural tracts.[64]

institutions covered under the current threshold of 25 (or approximately 61 percent) would continue to report HMDA data on closed-end mortgage loans, and approximately 90 percent or approximately 3.43 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria would continue to be reported. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[61] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 250, about 1,413 out of about 4,263 depository institutions covered under the current threshold of 25 (or approximately 33 percent) would continue to report HMDA data on closed-end mortgage loans, and approximately 90 percent or approximately 3.21 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria would continue to be reported. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[62] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 500, about 798 out of about 4,263 depository institutions covered under the current threshold of 25 (or approximately 19 percent) would continue to report HMDA data on closed-end mortgage loans, and approximately 83 percent or approximately 2.97 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria would continue to be reported. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[63] As discussed in more detail in part VII.E.2 below, about 1,620 of the estimated 2,480 financial institutions that the Bureau estimates will report closed-end loans at the threshold of 100 are eligible for a partial exemption under the EGRRCPA. The Bureau estimates that these partially exempt institutions report only 369,000 out of the estimated 2.7 million closed-end mortgage loans that will be reported at the threshold of 100.

[64] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 50, there would be a loss of at least 20 percent of reportable HMDA data in just under 300 out of approximately 74,000 total census tracts, or less than one-half of 1 percent of the total number of census tracts, relative to the current threshold. For low-to-moderate income census tracts, the Bureau estimated that there would be a loss of at least 20 percent of reportable HMDA data in less than 1 percent of such tracts relative to the current threshold, and for rural census tracts, the Bureau estimated there would be at least a 20 percent loss of reportable HMDA data in less than one-half of 1 percent of such tracts relative to the current threshold. As explained above and in greater detail in part VII.E.2 below, the differences in the

With the threshold of 100 closed-end mortgage loans established by this final rule, the Bureau estimates that, relative to the current threshold of 25, approximately 73,400 census tracts out of approximately 74,600 total census tracts in which HMDA data are currently reported, or over 98 percent, would retain more than 80 percent of reportable HMDA data. The Bureau estimates that there will be a decrease of at least 20 percent of reportable HMDA data on closed-end mortgage loans relative to the current threshold in about 1,200 out of approximately 74,600 total census tracts in which HMDA data are currently reported, or under 2 percent. For low-to-moderate income census tracts, with the threshold of 100 closed-end mortgage loans, the Bureau estimates that, relative to the current threshold of 25, approximately 97 percent of such tracts will retain more than 80 percent of reportable HMDA data, and there will be a decrease of at least 20 percent of reportable HMDA data in approximately 3 percent of such tracts. The Bureau also estimates that, relative to the current threshold of 25, approximately 95 percent of rural tracts will retain more than 80 percent of reportable HMDA data, and there will be a decrease of at least 20 percent of reportable HMDA data in approximately 5 percent of such tracts.[65]

The Bureau's estimates also reflect that the effect on data available at the census tract level would become more pronounced at closed-end mortgage loan thresholds above 100. For example, the Bureau estimates that, if the threshold were increased from 25 to 250 loans, approximately 68,800 out of the approximately 74,600 total census tracts in which HMDA data are currently reported, or over 92 percent, would retain more than 80 percent of reportable HMDA data, relative to the current threshold. The Bureau estimates there would be a decrease of at least 20 percent of reportable HMDA data on closed-end mortgage loans in about 5,800 out of approximately 74,600 total census tracts in which HMDA data are currently reported, or about 8 percent of those census tracts, relative to the current threshold. For low-to-moderate income census tracts, if the threshold were increased from 25 to 250, the Bureau estimates that approximately 90 percent of tracts would retain more than 80 percent of reportable HMDA data, and there would be a decrease of at least 20 percent of reportable HMDA data in approximately 10 percent of such tracts, relative to the current threshold. For rural tracts, the Bureau estimates that approximately 81 percent of tracts would retain more than 80 percent of reportable HMDA data, and there would be a decrease of at least 20 percent of reportable HMDA data in approximately 19 percent of such tracts, relative to the current threshold.[66]

Further, the Bureau estimates that, if the closed-end threshold were increased from 25 to 500 loans, approximately 60,500 out of approximately 74,600 total census tracts in which HMDA data are currently reported, or approximately 81 percent, would retain more than 80 percent of reportable HMDA data. The Bureau estimates there would be a decrease of at least 20 percent of reportable HMDA data on closed-end mortgage loans in approximately 14,100, or 19 percent of the total number of census tracts in which HMDA data are currently reported, relative to the current threshold of 25. For low-to-moderate income census tracts, the Bureau estimates that, if the threshold were increased from 25 to 500, over 78 percent of such tracts would retain more than 80 percent of reportable HMDA data, and there would be a decrease of at least 20 percent of reportable HMDA data in over 21 percent of such tracts. For rural census tracts, the Bureau estimates that approximately 62 percent of such tracts would retain more than 80 percent of reportable HMDA data, and there would be a decrease of at least 20 percent of reportable HMDA data in approximately 37 percent of such tracts, relative to the current threshold.[67]

The Bureau recognizes that any loan-volume threshold will affect individual markets differently, depending on the extent to which smaller creditors service individual markets and the market share of those creditors. The Bureau concludes, however, based on the estimates provided above, that the threshold of 100 closed-end loans adopted in this final rule will provide substantial visibility into rural and low-to-moderate income tracts and permit the public and public officials to identify patterns and trends at the local level. At the same time, the Bureau is concerned that the higher closed-end mortgage loan-volume thresholds above 100 suggested by industry commenters could have a material negative impact on the availability of data about patterns and trends at the local level and could affect the availability of data necessary to achieve HMDA's purposes.

Specific types of data. The Bureau has also considered the impact that increasing the threshold could have on data related to specific types of closed-end lending mentioned by commenters, such as applications and originations related to multifamily housing and manufactured housing lending. The Bureau estimates that with the closed-end threshold increased from 25 to 100 under the final rule, approximately 87 percent of multifamily loan applications and originations will continue to be reported by depository and nondepository institutions combined, when compared to the current threshold of 25 closed-end mortgage loans in today's market conditions. Regarding the effect on manufactured housing data, the Bureau estimates that at a threshold of 100 closed-end mortgage loans, approximately 96 percent of loans and applications related to manufactured housing will continue to

estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[65] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 100, there would be a loss of at least 20 percent of reportable HMDA data in about 1,100 out of approximately 74,000 total census tracts, or 1.5 percent of the total number of census tracts, relative to the current threshold. For low-to-moderate income census tracts, the Bureau estimated that there would be a loss of at least 20 percent of reportable HMDA data in 3 percent of such tracts relative to the current threshold, and for rural census tracts, the Bureau estimated there would be at least a 20 percent loss of reportable HMDA data in less than 3 percent of such tracts relative to the current threshold. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[66] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 250, there would be a loss of at least 20 percent of reportable HMDA data in over 4,000 out of approximately 74,000 total census tracts, or 5.4 percent of the total number of census tracts, relative to the current threshold. For low-to-moderate income census tracts, the Bureau estimated that there would be a loss of at least 20 percent of reportable HMDA data in just over 8 percent of such tracts relative to the current threshold, and for rural census tracts, the Bureau estimated there would be at least a 20 percent loss of reportable HMDA data in about 14 percent of such tracts relative to the current threshold. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[67] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 500, there would be a loss of at least 20 percent of reportable HMDA data in approximately 11,000 out of approximately 74,000 total census tracts, or 14.9 percent of the total number of census tracts, relative to the current threshold. For low-to-moderate income census tracts, the Bureau estimated that there would be a loss of at least 20 percent of reportable HMDA data in 17 percent of such tracts relative to the current threshold, and for rural census tracts, the Bureau estimated there would be at least a 20 percent loss of reportable HMDA data in 32 percent of such tracts relative to the current threshold. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

be reported by depository and nondepository institutions combined, when compared to the current threshold of 25 closed-end mortgage loans in today's market conditions. Increasing the threshold above 100 would have a more pronounced impact on data regarding both multifamily housing and manufactured housing lending. Although less data will be available regarding multifamily housing and manufactured housing lending at the threshold of 100 than at the current threshold, the Bureau believes that the limited decreases in the amount of data are justified by the benefits of relieving smaller-volume institutions of the burdens of HMDA reporting.

Ongoing Cost Reduction From Threshold of 100

As noted above, small financial institutions and trade associations commented on the cost of HMDA reporting, suggesting that compliance costs have had an impact on the ability of small financial institutions to serve their customers and communities. For the proposal and this final rule, the Bureau developed estimates for depository and nondepository institutions combined to determine the savings in annual ongoing costs at various thresholds.[68] These estimates illustrate the cost savings under the various thresholds when compared to the current threshold of 25.

The Bureau estimates that if the closed-end threshold were set at 50, institutions that originate between 25 and 49 closed-end mortgage loans would save approximately $3.7 million per year in total annual ongoing costs, relative to the current threshold of 25.[69] The Bureau estimates that with a threshold of 100 closed-end mortgage loans established by the final rule, institutions that originate between 25 and 99 closed-end mortgage loans will save approximately $11.2 million per year, relative to the current threshold of 25.[70] With a threshold of 250 or 500 closed-end mortgage loans, the Bureau estimates that institutions would save approximately $27.2 million and $45.4 million, respectively, relative to the current threshold of 25. Based on the Bureau's estimates, the Bureau believes that the cost reduction from increasing the threshold from 25 to 100 closed-end mortgage loans is significant and more than double the cost savings that a threshold of 50 closed-end mortgage loans would have provided, providing meaningful cost savings to institutions.

The Bureau recognizes that the estimated ongoing costs savings associated with increasing the threshold from 25 to 100 closed-end loans are less than they would have been absent the relief provided by the EGRRCPA. Nonetheless, the Bureau determines that these ongoing cost savings will provide meaningful burden reduction to smaller institutions that are currently covered at the threshold of 25 closed-end loans but will be excluded from closed-end reporting under the increased threshold in this final rule. Avoiding the imposition of such costs for these affected institutions may also enable smaller institutions to focus on lending activities and serving their communities, as suggested by some commenters.

The Bureau concludes that increasing the closed-end threshold to 100 will provide meaningful burden relief for lower-volume depository institutions while maintaining reporting sufficient to achieve HMDA's purposes. As discussed above, the Bureau has heard of significant burdens in complying with the 2015 HMDA Rule, especially from smaller institutions, and the Bureau has been able to confirm the impact of the rule and any potential changes to the closed-end threshold, based on the new 2018 HMDA data. The Bureau recognizes that there is some loss of data at this threshold but believes that it strikes the right balance between the burden of collecting and reporting and the benefit of HMDA data. The Bureau's estimates reflect an estimated decrease of about 4 percent of total originations by depository institutions reportable under the current closed-end threshold of 25 in today's market conditions. According to the Bureau's estimates, about 60 percent of current HMDA reporters that are depository institutions will continue to report HMDA data, and only approximately 1,200 out of 74,600 census tracts will reflect a decrease of at least 20 percent in HMDA data from depository and nondepository institutions. Therefore, the Bureau believes that the decrease in data from institutions that will be newly excluded with the closed-end threshold set at 100 is justified by the significant reduction in burden for the approximately 1,640 lower-volume depository institutions that will no longer be required to report HMDA data when compared to the current threshold of 25. The threshold of 100 closed-end mortgage loans balances the benefits and burdens of covering institutions engaged in closed-end mortgage lending by retaining significant coverage of the closed-end market while excluding from coverage smaller institutions whose limited closed-end data would be of lesser utility in furthering HMDA's purposes. For the reasons stated above, the Bureau is amending § 1003.2(g)(1)(v)(A) and comments 2(g)–1 and 2(g)–5 to adjust the threshold to 100 closed-end mortgage loans. As discussed in part VI.A below, the change to the closed-end threshold will take effect on July 1, 2020, to provide relief quickly.[71]

2(g)(1)(v)(B)

Section 1003.2(g) defines financial institution for purposes of Regulation C and conditions Regulation C's institutional coverage, in part, on the institution's open-end line of credit origination volume. In the 2015 HMDA Rule, the Bureau established the threshold at 100 open-end lines of credit and required financial institutions that originate at least 100 open-end lines of credit in each of the two preceding calendar years to report data on open-end lines of credit.[72] In the 2017 HMDA Rule, the Bureau amended § 1003.2(g) to increase for two years (calendar years 2018 and 2019) the open-end threshold from 100 to 500 open-end lines of credit. In the May 2019 Proposal, the Bureau proposed to amend

[68] These cost estimates reflect the combined ongoing reduction in costs for depository and nondepository institutions. These estimates also take into account the enactment of the EGRRCPA, which created partial exemptions from HMDA's requirements that certain insured depository institutions and insured credit unions may use, and reflect updates made to the cost estimates since the May 2019 Proposal. See part VII.E.2 below for a more comprehensive discussion of the cost estimates.

[69] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 50, the aggregate savings on the operational costs associated with reporting closed-end mortgage loans would be approximately $2.2 million per year. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[70] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 100, the aggregate savings on the operational costs associated with reporting closed-end mortgage loans would be approximately $8.1 million per year. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[71] Thus, as comment 2(g)–1 explains, in 2021, a financial institution does not meet the loan-volume test described in § 1003.2(g)(1)(v)(A) if it originated fewer than 100 closed-end mortgage loans during either 2019 or 2020. See part VI.A below for a discussion of the HMDA obligations for the 2020 data collection year of institutions affected by the closed-end threshold change, and see the section-by-section analysis of § 1003.3(c)(11) in this part for a discussion of optional reporting of 2020 closed-end data permitted for such institutions.

[72] Section 1003.3(c)(12) includes a complementary transactional coverage threshold set at the same level that determines whether a financial institution is required to collect and report data on open-end lines of credit.

§ 1003.2(g)(1)(v)(B) and comments 2(g)–3 and –5, effective January 1, 2020, to extend until January 1, 2022, the temporary open-end institutional coverage threshold for depository institutions of 500 open-end lines of credit. Upon expiration of this temporary threshold, the Bureau proposed to increase the permanent threshold from 100 to 200 open-end lines of credit.[73] The Bureau sought comments on how the proposed temporary and permanent increases to the open-end threshold would affect the number of financial institutions required to report data on open-end lines of credit, the significance of the data that would not be available for achieving HMDA's purposes as a result of the proposed increases, and the reduction in burden that would result from the proposed increases for institutions that would not be required to report. In the 2019 HMDA Rule, the Bureau finalized the proposed extension of the temporary open-end institutional coverage threshold for depository institutions of 500 open-end lines of credit in § 1003.2(g)(1)(v)(B) until January 1, 2022.[74] For the reasons discussed below, the Bureau is now finalizing the proposed amendments to § 1003.2(g)(1)(v)(B) and comments 2(g)–3 and –5 to increase the permanent threshold from 100 to 200 open-end lines of credit, effective January 1, 2022.

Background on Reporting Data Concerning Open-End Lines of Credit Under the 2015 HMDA Rule and the 2017 HMDA Rule

By its terms, the definition of ''mortgage loan'' in HMDA covers all loans secured by residential real property and home improvement loans, whether open- or closed-end.[75] However, home-equity lines of credit were uncommon in the 1970s and early 1980s when Regulation C was first issued, and the Board's definition of mortgage loan covered only closed-end loans. In 2000, in response to the increasing importance of open-end lending in the housing market, the Board proposed to revise Regulation C to require mandatory reporting of all home-equity lines of credit, which lenders had the option to report.[76] However, the Board's 2002 final rule left open-end reporting voluntary, as the Board determined that the benefits of mandatory reporting relative to other then-proposed amendments (such as collecting information about higher-priced loans) did not justify the increased burden.[77]

As discussed in the 2015 HMDA Rule, open-end mortgage lending continued to increase in the years following the Board's 2002 final rule, particularly in areas with high home-price appreciation.[78] In light of that development and the role that open-end lines of credit may have played in contributing to the financial crisis,[79] the Bureau decided in the 2015 HMDA Rule to require reporting of dwelling-secured, consumer purpose open-end lines of credit,[80] concluding that doing so was a reasonable interpretation of ''mortgage loan'' in HMDA and necessary and proper to effectuate the purposes of HMDA and prevent evasions thereof.[81]

As noted in the 2015 HMDA Rule, in expanding coverage to include mandatory reporting of open-end lines of credit, the Bureau recognized that doing so would impose one-time and ongoing operational costs on reporting institutions, that the one-time costs of modifying processes and systems and training staff to begin open-end line of credit reporting likely would impose significant costs on some institutions, and that institutions' ongoing reporting costs would increase as a function of their open-end lending volume.[82] The Bureau sought to avoid imposing these costs on small institutions with limited open-end lending, where the benefits of reporting the data did not justify the costs of reporting.[83] In seeking to draw such a line, the Bureau acknowledged that it was handicapped by the lack of available data concerning open-end lending.[84] This created challenges both in estimating the distribution of open-end origination volume across financial institutions and in estimating the one-time and ongoing costs that institutions of various sizes would be likely to incur in reporting data on open-end lending.

To estimate the one-time and ongoing costs of reporting data under HMDA in the 2015 HMDA Rule, the Bureau identified seven ''dimensions'' of compliance operations and used those to define three broadly representative financial institutions according to the overall level of complexity of their compliance operations: ''tier 1'' (high-complexity), ''tier 2'' (moderate-complexity), and ''tier 3'' (low-complexity).[85] The Bureau then sought to estimate one-time and ongoing costs for a representative institution in each tier.[86]

The Bureau recognized in the 2015 HMDA Rule that the one-time cost of reporting open-end lines of credit could be substantial because most financial institutions had not reported open-end lines of credit and thus would have to

[73] The Bureau also proposed conforming changes to the institutional coverage threshold for nondepository institutions in § 1003.2(g)(2)(ii)(B) and to the transactional coverage threshold in § 1003.3(c)(12), as discussed below.

[74] The Bureau also finalized conforming amendments to extend for two years the temporary open-end institutional coverage threshold for nondepository institutions in § 1003.2(g)(2)(ii)(B) and to align the timeframe of the temporary open-end transactional coverage threshold in § 1003.3(c)(12). Because the extension of the temporary threshold lasts two years, and the Bureau had not yet made a determination about its proposed permanent threshold when it issued the 2019 HMDA Rule, that rule would have restored effective January 1, 2022 the threshold set in the 2015 HMDA Rule of 100 open-end lines of credit in §§ 1003.2(g) and 1003.3(c)(12) absent this final rule.

[75] HMDA section 303(2), 12 U.S.C. 2802(2).

[76] 65 FR 78656, 78659–60 (Dec. 15, 2000). In 1988, the Board had amended Regulation C to permit, but not require, financial institutions to report certain home-equity lines of credit. 53 FR 31683, 31685 (Aug. 19, 1988).

[77] 67 FR 7222, 7225 (Feb. 15, 2002).

[78] 80 FR 66128, 66160 (Oct. 28, 2015).

[79] *Id.* The Bureau stated in the 2015 HMDA Rule that research indicated that some real estate investors used open-end, home-secured lines of credit to purchase non-owner-occupied properties, which correlated with higher first-mortgage defaults and home-price depreciation during the financial crisis. *Id.* In the years leading up to the crisis, such home-equity lines of credit often were made and fully drawn more or less simultaneously with first-lien home purchase loans, essentially creating high loan-to-value home purchase transactions that were not visible in the HMDA dataset. *Id.*

[80] The Bureau also required reporting of applications for, and originations of, dwelling-secured commercial-purpose lines of credit for home purchase, home improvement, or refinancing purposes. *Id.* at 66171.

[81] *Id.* at 66157–62. HMDA and Regulation C are designed to provide citizens and public officials sufficient information about mortgage lending to ensure that financial institutions are serving the housing needs of their communities, to assist public officials in distributing public-sector investment so as to attract private investment to areas where it is needed, and to assist in identifying possible discriminatory lending patterns and enforcing antidiscrimination statutes. The Bureau believes that collecting information about all dwelling-secured, consumer-purpose open-end lines of credit serves these purposes.

[82] *Id.* at 66128, 66161.

[83] *Id.* at 66149.

[84] *Id.*

[85] *Id.* at 66261, 66269–70. In the 2015 HMDA Rule and the 2017 HMDA Rule, the Bureau assigned financial institutions to tiers by adopting cutoffs based on the estimated open-end line of credit volume. *Id.* at 66285; 82 FR 43088, 43128 (Sept. 13, 2017). Specifically, the Bureau assumed the lenders that originated fewer than 200 but more than 100 open-end lines of credit were tier 3 (low-complexity) open-end reporters; lenders that originate between 200 and 7,000 open-lines of credit were tier 2 (moderate-complexity) open-end reporters; and lenders that originated more than 7,000 open-end lines of credit were tier 1 (high-complexity) open-end reporters. 80 FR 66128, 66285 (Oct. 28, 2015); 82 FR 43088, 43128 (Sept. 13, 2017). As explained below in part VII.D.1, for purposes of this final rule, the Bureau has used a more precise methodology to assign excluded financial institutions to tiers 2 and 3 for their open-end reporting, which relies on constraints relating to the estimated numbers of impacted institutions and loan/application register records for the applicable provision.

[86] 80 FR 66128, 66264–65 (Oct. 28, 2015); *see also id.* at 66284.

develop completely new systems to begin reporting these data. As a result, there would be one-time costs to create processes and systems for open-end lines of credit.[87] However, for low-complexity tier 3 institutions, the Bureau believed that the additional one-time costs of open-end reporting would be relatively low. Because these institutions are less reliant on information technology systems for HMDA reporting and they may process open-end lines of credit on the same system and in the same business unit as closed-end mortgage loans, their one-time costs would be derived mostly from new training and procedures adopted for the overall changes in the final rule, not distinct from costs related to changes in reporting of closed-end mortgage loans.[88]

The Bureau acknowledged in the 2015 HMDA Rule that ongoing costs for open-end reporting vary by institutions due to many factors, such as size, operational structure, and product complexity, and that this variance makes it impossible to provide complete and definitive cost estimates.[89] At the same time, the Bureau stated that it believed that the HMDA reporting process and ongoing operational cost structure for open-end reporting would be fundamentally similar to closed-end reporting.[90] Thus, using the ongoing cost estimates developed for closed-end reporting, the Bureau estimated that for a representative high-complexity tier 1 institution the ongoing operational costs would be $273,000 per year; for a representative moderate-complexity tier 2 institution $43,400 per year; and for a representative low-complexity tier 3 institution $8,600 per year.[91] These translated into costs per HMDA record of approximately $9, $43, and $57 respectively.[92] The Bureau acknowledged that, precisely because no good source of publicly available data existed concerning open-end lines of credit, it was difficult to predict the accuracy of the Bureau's cost estimates but also stated its belief that these estimates were reasonably reliable.[93]

Drawing on all of these estimates, the Bureau decided in the 2015 HMDA Rule to establish an open-end threshold that would require institutions that originate 100 or more open-end lines of credit in each of the two preceding calendar years to report data on such lines of credit. The Bureau estimated that this threshold would avoid imposing the burden of establishing mandatory open-end reporting on approximately 3,000 predominantly smaller-sized institutions with low-volume open-end lending[94] and would require reporting by 749 financial institutions, all but 24 of which would also report data on their closed-end mortgage lending.[95] The Bureau explained in the 2015 HMDA Rule that it believed this threshold appropriately balanced the benefits and burdens of covering institutions based on their open-end mortgage lending.[96] However, as discussed in the 2017 HMDA Rule, the Bureau lacked robust data for the estimates that it used to establish the open-end threshold in the 2015 HMDA Rule.[97]

The 2017 HMDA Rule explained that, between 2013 and 2017, the number of dwelling-secured open-end lines of credit financial institutions originated had increased by 36 percent.[98] The Bureau noted that, to the extent institutions that had been originating fewer than 100 open-end lines of credit shared in that growth, the number of institutions at the margin that would be required to report under an open-end threshold of 100 lines of credit would also increase.[99] Additionally, in the 2017 HMDA Rule, the Bureau explained that information received by the Bureau since issuing the 2015 HMDA Rule had caused the Bureau to question its assumption that certain low-complexity institutions[100] process home-equity lines of credit on the same data platforms as closed-end mortgages, on which the Bureau based its assumption that the one-time costs for these institutions would be minimal.[101] After issuing the 2015 HMDA Rule, the Bureau heard reports suggesting that one-time costs to begin reporting open-end lines of credit could be as high as $100,000 for such institutions.[102] The Bureau likewise heard reports suggesting that the ongoing costs for these institutions to report open-end lines of credit, which the Bureau estimated would be under $10,000 per year and add under $60 per line of credit, could be at least three times higher than the Bureau had estimated.[103]

Based on this information regarding one-time and ongoing costs and new data indicating that more institutions would have reporting responsibilities under the 100-loan open-end threshold than estimated in the 2015 HMDA Rule, the Bureau increased for two years (*i.e.,* until January 1, 2020) the open-end threshold to 500 in the 2017 HMDA Rule.[104] Specifically, the Bureau amended § 1003.2(g)(1)(v)(B) and comments 2(g)–3 and –5, effective January 1, 2018, to increase temporarily the open-end threshold from 100 to 500 and, effective January 1, 2020, to revert to a permanent threshold of 100. This temporary increase was intended to allow the Bureau to collect additional data and assess what open-end threshold would best balance the benefits and burdens of covering institutions.

In the May 2019 Proposal, the Bureau proposed to extend until January 1, 2022, the temporary open-end institutional coverage threshold for depository institutions of 500 open-end lines of credit. Upon expiration of this temporary threshold, the Bureau proposed to set the permanent threshold at 200 open-end lines of credit.[105] In the 2019 HMDA Rule, the Bureau finalized the proposed two-year extension of the temporary threshold of 500 open-end lines of credit.[106] The Bureau explained that the extension of the temporary threshold would provide additional time for the Bureau to issue this final rule in 2020 on the permanent open-end threshold and for affected institutions to prepare for compliance with the final rule.[107]

[87] *Id.* at 66264; *see also id.* at 66284–85.

[88] *Id.* at 66265; *see also id.* at 66284.

[89] *Id.* at 66285.

[90] *Id.*

[91] *Id.* at 66264, 66286.

[92] *Id.*

[93] *Id.* at 66162.

[94] *Id.* The estimate of the number of institutions that would be excluded from reporting open-end lines of credit by the transactional coverage threshold was relative to the number that would have been covered under the Bureau's proposal that led to the 2015 HMDA Rule. Under that proposal, a financial institution would have been required to report its open-end lines of credit if it had originated at least 25 closed-end mortgage loans in each of the two preceding years without regard to how many open-end lines of credit the institution originated. *See* Home Mortgage Disclosure (Regulation C), 79 FR 51732 (Aug. 29, 2014).

[95] 80 FR 66128, 66281 (Oct. 28, 2015).

[96] *Id.* at 66162.

[97] 82 FR 43088, 43094 (Sept. 13, 2017).

[98] *Id.*

[99] *Id.*

[100] *See supra* notes 85–93 and accompanying text.

[101] 82 FR 43088, 43094 (Sept. 13, 2017).

[102] *Id.*

[103] *Id.*

[104] *Id.* at 43088. Comments received on the July 2017 HMDA Proposal to change temporarily the open-end threshold are discussed in the 2017 HMDA Rule. *Id.* at 43094–95. In the 2015 HMDA Rule and the 2017 HMDA Rule, the Bureau declined to retain optional reporting of open-end lines of credit, after concluding that improved visibility into this segment of the mortgage market is critical because of the risks posed by these products to consumers and local markets and the lack of other publicly available data about these products. *Id.* at 43095; 80 FR 66128, 66160–61 (Oct. 28, 2015). However, Regulation C as amended by the 2017 HMDA Rule permits voluntary reporting by financial institutions that do not meet the open-end threshold. 12 CFR 1003.3(c)(12).

[105] The Bureau proposed conforming amendments to § 1003.3(c)(12).

[106] 84 FR 57946 (Oct. 29, 2019).

[107] *Id.* at 57953.

Comments Received on Permanent Open-End Line of Credit Threshold for Institutional Coverage of Depository Institutions

The Bureau received a number of comments relating to the proposed permanent increase in the open-end threshold from 100 to 200 open-end lines of credit in §§ 1003.2(g) and 1003.3(c)(12). Commenters typically discussed the open-end threshold without distinguishing between the threshold applicable to depository institutions under § 1003.2(g)(1)(v)(B) and the threshold applicable to nondepository institutions under § 1003.2(g)(2)(ii)(B).

Industry commenters generally expressed support for an increase in the permanent open-end threshold, indicating that a threshold of 200 open-end lines of credit would be preferable to the threshold of 100 open-end lines of credit that would otherwise take effect beginning in 2022. Many industry commenters described the significant costs that HMDA data collection and reporting impose on small institutions, and some expressed concern that they might not be able to offer open-end lines of credit at all if the threshold of 100 open-end lines of credit were to take effect. One national trade association and many small financial institutions stated that open-end lines of credit are crucial products for borrowers and expressed concern that the costs associated with reporting such lines of credit would make them unprofitable, leading banks to either discontinue offering such loans or to pass on cost increases to consumers. Many industry commenters also suggested that higher thresholds would allow institutions to focus on making loans in the communities they serve rather than diverting resources to HMDA compliance. Another national trade association stated that lenders may seek to manage their origination volumes to stay below the applicable open-end threshold, which could limit consumers' access to credit. This commenter stated that compliance with HMDA requires specialized staffing and training as well as dedicated software, policies, and procedures, and that an institution's decision to exceed the origination volume that triggers open-end reporting would involve a careful assessment of the time, cost, and risk associated with implementing and supporting ongoing open-end reporting. Several commenters stated that there would be significant costs to implementing open-end reporting for institutions that have not previously reported such transactions, with one small financial institution stating that it originated between 100 and 200 open-end lines of credit annually and that reporting such loans would entail considerable effort because these transactions are processed by a different department and system than its reportable closed-end mortgage loans.

Some industry commenters advocating for an increase in the open-end threshold asserted that data on open-end lines of credit are of limited value in serving HMDA's statutory purposes. A few national trade associations stated that open-end lines of credit provide little information about whether lenders are serving the housing needs of their communities because such loans are generally used for non-housing related purposes, such as paying for educational expenses or consolidating outstanding debt. One national trade association stated that open-end lending data are of limited value for fair lending purposes because of the unique features typically present in such transactions and because only certain borrowers—existing homeowners with equity in their homes—can obtain them.

A large number of industry commenters recommended that the Bureau make the temporary threshold of 500 open-end lines of credit permanent or raise the threshold even higher, such as to 1,000. These commenters noted that based on the Bureau's estimates, maintaining the current threshold of 500 open-end lines of credit would relieve approximately 280 institutions from reporting open-end data with only a 6 percent decrease in the overall number of open-end lines of credit reported relative to the proposed permanent threshold of 200. One State trade association expressed concern that the limited increase in open-end data reported at a permanent threshold of 200 as compared to 500 open-end lines of credit would not justify the costs for the institutions that would be newly required to report open-end data. One national trade association stated that many smaller institutions originate close to 500 open-end lines of credit annually and that if the permanent threshold were set at 200 these lenders might curtail their open-end lending to avoid incurring the additional compliance costs associated with open-end reporting. A few industry commenters stated that the continuity that would be provided by a permanent 500 open-end threshold would be valuable and questioned why the Bureau would set the open-end threshold at 500 for several years but not retain this threshold. Although not part of the May 2019 Proposal, many industry commenters recommended that the Bureau return to optional rather than mandatory reporting of open-end lines of credit.

Other commenters, including many consumer and civil rights groups, a bank, a State attorney general, and some members of Congress, expressed opposition to the proposed increase from 100 to 200 in the permanent open-end threshold based on their concerns about the consequences of excluding more institutions and open-end lines of credit from HMDA reporting. Many of these commenters stated that, in the years before the 2008 financial crisis, abuses pervaded in open-end lending that resulted in distress or foreclosure for large numbers of homeowners. A State attorney general noted that open-end lines of credit were often extended simultaneously with closed-end home purchase loans in place of down payments, thus bypassing the need for borrowers to obtain private mortgage insurance and creating higher debt obligations that increased the risk to both closed-end mortgage lenders and borrowers. A large number of consumer groups, civil rights groups, and other organizations noted in a joint comment letter the Bureau's estimates in the May 2019 Proposal that increasing the permanent threshold from 100 to 200 open-end lines of credit would exempt 401 lenders originating 69,000 open-end lines of credit from reporting such data under HMDA. These commenters expressed concern that too many lenders and open-end lines of credit might escape public scrutiny at such a higher permanent threshold and thus make it more likely that events similar to those that led to the 2008 financial crisis would occur again.

These consumer groups, civil rights groups, and other organizations also stated that the 2018 HMDA Data indicated that open-end lines of credit have a high incidence of features that can be risky for borrowers, particularly when layered on top of one another. They explained that the 2018 HMDA Data show that 77 percent of open-end lines of credit have adjustable rates, 50 percent feature interest-only payments, and 28 percent include prepayment penalties. These commenters also stated that the 2018 HMDA Data show that the median interest rate, as well as the interest rate at the 95th percentile, was significantly higher for open-end lines of credit than for closed-end mortgage loans and suggested that the most vulnerable borrowers were obtaining the open-end lines of credit with the highest interest rates.

These commenters stated further that the increase in open-end lending

between 2013 and 2017 discussed in the May 2019 Proposal supports maintaining the permanent threshold of 100 open-end lines of credit to increase visibility into open-end lending. A State attorney general expressed concern that the May 2019 Proposal did not provide a rationale as to how decreasing open-end reporting by increasing the permanent open-end threshold serves the purposes of HMDA. This commenter stated that the Bureau's analysis instead focused almost entirely on the cost to lenders associated with open-end reporting. Some members of Congress stated that data on open-end lines of credit remain limited and noted that the Bureau had to consult multiple sources to estimate the impact of the proposed changes to the open-end threshold. These commenters expressed concern that the Bureau would reduce future open-end reporting based on limited data, particularly in light of the local and national concerns related to open-end lending prior to the financial crisis in 2008 cited by the Bureau in the 2015 HMDA Rule.

Final Rule

The Bureau has considered the comments received and, pursuant to its authority under HMDA section 305(a) as discussed above, has decided to increase the permanent open-end threshold to 200 open-end lines of credit, as proposed. As discussed below, the increase in the permanent threshold from 100 to 200 open-end lines of credit will provide meaningful burden relief for smaller institutions while still providing significant market coverage of open-end lending.

As discussed in the May 2019 Proposal, several developments since the Bureau issued the 2015 HMDA Rule have affected the Bureau's analyses of the costs and benefits associated with the open-end threshold. As explained in more detail in part VII below, the estimates the Bureau used in the 2015 HMDA Rule may understate the burden that open-end reporting would impose on smaller institutions if they were required to begin reporting on January 1, 2022. For example, in developing the one-time cost estimates for open-end lines of credit in the 2015 HMDA Rule, the Bureau had envisioned that there would be cost sharing between the line of business that conducts open-end lending and the line of business that conducts closed-end lending at the corporate level, as the implementation of open-end reporting that became mandatory under the 2015 HMDA Rule would coincide with the implementation of the changes to closed-end reporting under the 2015 HMDA Rule. However, this type of cost sharing is less likely now since financial institutions have already implemented almost all of the closed-end reporting changes required under the 2015 HMDA Rule. As explained in more detail in part VII.E.3, the Bureau's coverage estimates also indicate that the total number of institutions exceeding the threshold of 100 open-end lines of credit in 2018 would be approximately 1,014, which is significantly higher than the estimate of 749 in the 2015 HMDA Rule that was based on 2013 data.[108]

Another development since the Bureau finalized the 2015 HMDA Rule is the enactment of the EGRRCPA, which created partial exemptions from HMDA's requirements that certain insured depository institutions and insured credit unions may now use.[109] The partial exemption for open-end lines of credit under the EGRRCPA relieves certain insured depository institutions and insured credit unions that originated fewer than 500 open-end mortgage loans in each of the two preceding calendar years of the obligation to report many of the data points generally required by Regulation C.[110] The EGRRCPA has thus changed the costs and benefits associated with different coverage thresholds, as the partial exemptions are available to the vast majority of the depository financial institutions that originate fewer than 500 open-end lines of credit annually.[111]

The Bureau has considered the appropriate permanent open-end threshold in light of these developments and the comments received in response to the May 2019 Proposal and the July 2019 Reopening Notice. On balance, the Bureau determines that the permanent threshold of 200 open-end lines of credit provides sufficient information on open-end lending to serve HMDA's purposes while appropriately reducing one-time and ongoing costs for smaller institutions that would be incurred if the threshold of 100 open-end lines of credit were to take effect.[112] These considerations are discussed in turn below, and additional explanation of the Bureau's cost estimates is provided in the Bureau's analysis under Dodd-Frank Act section 1022(b) in part VII.E.3 below.[113]

Effect on market coverage. While the increase in the permanent threshold to 200 open-end lines of credit will reduce market coverage compared to the threshold of 100 that would otherwise take effect, information about a sizeable portion of the open-end lending market will still be available. The Bureau has used multiple data sources, including credit union Call Reports, Call Reports for banks and thrifts, HMDA data, and Consumer Credit Panel data, to develop estimates about open-end originations for institutions that offer open-end lines of credit and to assess the impact of various thresholds on the numbers of institutions that report and the number of lines of credit about which they report under various scenarios.[114] Based on this information, the Bureau estimates that, as of 2018, approximately 333 financial institutions originated at least 500 open-end lines of credit in each of the two preceding years, approximately 613 financial institutions originated at least 200 open-end lines of credit in each of the two preceding years, and approximately 1,014 financial institutions originated at least 100 open-end lines of credit in each of the two preceding years.[115] Under the permanent threshold of 200 open-end lines of credit, the Bureau estimates about 1.34 million lines of credit or approximately 84 percent of origination volume will be reported by about 9 percent of all institutions providing open-end lines of credit.[116] By comparison, the Bureau estimates that about 1.41 million lines of credit or approximately 89 percent of origination volume would be reported by about 15 percent of all institutions providing open-end lines of credit if the permanent threshold were to adjust to

[108] 82 FR 43088, 43094 (Sept. 13, 2017).

[109] Public Law 115–174, 132 Stat. 1296 (2018).

[110] *See* 84 FR 57946 (Oct. 29, 2019).

[111] *See infra* part VII.E.3.

[112] One commenter expressed concern as to how the increase in the open-end threshold would serve HMDA's purposes. As discussed above, this increase in the permanent open-end threshold effectuates the purposes of HMDA and facilitates compliance with HMDA by reducing burden, while still providing significant market coverage.

[113] As explained in part VII below, the Bureau derived these estimates using estimates of savings for open-end lines of credit for representative financial institutions.

[114] As noted by several members of Congress, the Bureau consulted multiple sources to develop its open-end estimates for the May 2019 Proposal. Because collection of data on open-end lines of credit only became mandatory starting in 2018 under the 2015 HMDA Rule and the 2017 HMDA Rule, no single data source existed as of the time of the May 2019 Proposal that could accurately capture the number of originations of open-end lines of credit in the entire market and by lenders. In part VII of this final rule, the Bureau has supplemented the analyses from the May 2019 Proposal with the 2018 HMDA data. For information about the HMDA data used in developing and supplementing the Bureau estimates, see *infra* part VII.E.3.

[115] *See infra* part VII.E.3 at table 4 for estimates of coverage among all lenders that are active in the open-end line of credit market at open-end coverage thresholds of 100, 200, and 500.

[116] *Id.*

100 open-end lines of credit. The Bureau determines that the benefits of the one-time and ongoing cost savings for the estimated 401 affected institutions originating between 100 and 199 open-end lines of credit, all but 17 of which are depository financial institutions, justify the limited decrease in the data reported about open-end lending that will result from this threshold increase. The permanent threshold of 200 open-end lines of credit balances the benefits and burdens of covering institutions engaged in open-end mortgage lending by retaining significant coverage of the open-end market while excluding from coverage smaller institutions whose limited open-end data would be of lesser utility in furthering HMDA's purposes.

Additionally, the effect of a threshold of 200 open-end lines of credit will be limited because the EGRRCPA now provides a partial exemption that exempts approximately 378 of the estimated 401 institutions that the permanent threshold increase will affect from any obligation to report many of the data points generally required by Regulation C for open-end lines of credit. In light of the EGRRCPA's partial exemption from reporting certain data for open-end lines of credit for certain insured depository institutions and insured credit unions, setting the permanent threshold at 200 open-end lines of credit will result in a much smaller decrease in data than the Bureau anticipated when it adopted a threshold of 100 open-end lines of credit in the 2015 HMDA Rule or when it revisited the open-end line of credit threshold in the 2017 HMDA Rule.

The Bureau declines to increase the permanent threshold further, as suggested by several commenters. Under a threshold of 500 open-end lines of credit, the Bureau estimates that about 1.23 million lines of credit or approximately 78 percent of origination volume would be reported by about 5 percent of all institutions providing open-end lines of credit. The Bureau determines that the more significant reduction in open-end reporting that would result if the current threshold of 500 open-end lines of credit were permanent, or if the Bureau increased the threshold to a level above 500, is not warranted. The temporary threshold of 500 open-end lines of credit was intended to allow the Bureau time to collect additional data and assess the appropriate level of the permanent threshold.[117] Although the Bureau appreciates some commenters' suggestions regarding the benefits of continuity that would result from a permanent threshold of 500 open-end lines of credit, it determines that the permanent threshold of 200 open-end lines of credit adopted in this rule best balances the benefits and burdens of covering institutions based on their open-end lending volume. The data about open-end lines of credit that will be reported at this threshold will assist HMDA data users in understanding how financial institutions are serving the housing needs of their communities and assist in the distribution of public sector investments. The Bureau recognizes, as noted by several commenters, that open-end lines of credit may be used for non-housing related purposes, but the Bureau believes the data on these dwelling-secured loans will further HMDA purposes. The visibility into this segment of the mortgage market that will result from the permanent threshold of 200 open-end lines of credit, as opposed to a higher threshold, will also allow for a better understanding of these products and monitoring of the potential risks, as noted by many commenters, that could be associated with such loans. Such data could also help to assist in identifying possible discriminatory lending patterns if, for example, risky lending practices were concentrated among certain borrowers or communities.[118]

Additionally, and as discussed above, the EGRRCPA partial exemption already relieves most lenders originating fewer than 500 open-end lines of credit in each of the two preceding years from the requirement to report many data points associated with their open-end transactions. In light of the concerns discussed above and the existing relief provided by the EGRRCPA at a threshold of 500, the Bureau determines that it is not appropriate to set the permanent threshold for open-end lines of credit at 500 or higher. Doing so would provide a complete exclusion from reporting all open-end data for institutions below the threshold of 500, even though Congress opted to provide only a partial exemption at the threshold of 500, and would extend that complete exclusion to institutions that Congress did not include in even the partial exemption. For the reasons stated above, the Bureau also declines to adopt the recommendation of several commenters to return to voluntary open-end reporting, which it did not propose.[119]

Reduction in one-time costs from permanent threshold of 200. The Bureau's increase in the permanent open-end threshold to 200 open-end lines of credit after the temporary extension expires in 2022 will avoid imposing one-time costs of reporting open-end lines of credit on institutions originating between 100 and 199 open-end lines of credit. The Bureau estimates that setting the permanent threshold at 200 rather than 100 open-end lines of credit will exclude 401 institutions from reporting open-end lines of credit starting in 2022. According to the Bureau's estimates, about 309 of those 401 financial institutions are low-complexity tier 3 open-end reporters, about 92 are moderate-complexity tier 2 open-end reporters, and none are high-complexity tier 1 reporters.[120]

The Bureau recognizes that, as a small financial institution commenter discussed, financial institutions may process applications for open-end lines of credit in different departments and on different systems than those used for closed-end loans. Many institutions that would have had to report with a threshold of 100 after the extension of the temporary threshold of 500 expires in 2022 do not currently report open-end lines of credit. These institutions might have to develop completely new reporting infrastructures to comply with mandatory reporting if the threshold of 100 lines of credit were to take effect, including new training, software, and policies and procedures. As a result, these institutions would incur one-time costs to create processes and systems for reporting open-end lines of credit in addition to the one-time costs to modify processes and systems used for reporting other mortgage products.

As explained in part VII below, the Bureau estimates that increasing the

[117] *See* 84 FR 57946, 57953 (Oct. 29, 2019); 82 FR 43088, 43095–96 (Sept. 13, 2017).

[118] One commenter suggested that data on open-end lines of credit are less valuable for fair lending analyses because these products are limited to borrowers with existing equity in their homes. In the 2015 HMDA Rule, the Bureau recognized that borrowers may not be evaluated for open-end credit in the same manner as for traditional mortgage loans, with adequate home equity being a factor. It stated further, however, that lending practices during the financial crisis demonstrated that during prolonged periods of home-price appreciation lenders became increasingly comfortable originating home-equity products to borrowers with less and less equity to spare. 80 FR 66128, 66161 (Oct. 28, 2015). The Bureau continues to believe that the more leveraged the borrower, the more at risk the borrower is of losing his or her home. *Id.*

[119] *See supra* note 104. In establishing partial exemptions for reporting data on open-end lines of credit in the EGRRCPA, Congress appears to have assumed that open-end lines of credit should be reported, building upon the Bureau's decision in the 2015 HMDA Rule to require reporting of open-end lines of credit.

[120] For an explanation of the Bureau's assumptions in assigning institutions to tiers 1, 2, and 3, see *supra* note 85 and *infra* part VII.D.1.

threshold from 100 to 200 open-end lines of credit starting in 2022 will result in a one-time cost savings of approximately $3,000 for low-complexity tier 3 reporters and $250,000 for moderate-complexity tier 2 reporters, for an aggregate savings of about $23.9 million in avoided one-time costs associated with reporting open-end lines of credit.[121] The Bureau determines that avoiding the burden on smaller institutions of implementing open-end reporting, which as commenters noted could involve setting up entirely new reporting infrastructures distinct from those used for closed-end mortgage loans, is justified by the limited decrease in open-end data that will be reported under this final rule, as discussed in more detail above.

Ongoing cost reduction from permanent threshold of 200. The increase in the open-end threshold from 100 to 200 open-end lines of credit starting in 2022 will permanently relieve institutions that originate between 100 and 199 open-end lines of credit of the ongoing costs associated with reporting open-end lines of credit that they might otherwise incur if the threshold of 100 open-end lines of credit established in the 2015 HMDA Rule were to take effect. As noted above, many industry commenters expressed how costly and resource-intensive HMDA compliance can be on an ongoing basis for smaller institutions.

As discussed in more detail in part VII below, the Bureau estimates that increasing the permanent threshold from 100 to 200 open-end lines of credit will result in annual ongoing cost savings of approximately $4,300 for low-complexity tier 3 institutions eligible for the EGRRCPA partial exemption and $21,900 for moderate-complexity tier 2 institutions eligible for the EGRRCPA partial exemption. For the low-complexity tier 3 and moderate-complexity tier 2 institutions that are not eligible for the EGRRCPA partial exemption, the Bureau estimates that the increase in the permanent threshold from 100 to 200 open-end lines of credit will result in annual ongoing cost savings of approximately $8,800 and $44,700, respectively. The Bureau estimates that the increase in the permanent threshold will result in aggregate savings on the ongoing operational costs associated with open-end lines of credit of about $3.7 million per year starting in 2022.[122] The Bureau recognizes that the estimated ongoing costs savings associated with increasing the permanent threshold from 100 to 200 open-end lines of credit are less than they would have been absent the relief provided by the EGRRCPA. Nonetheless, the Bureau determines that these ongoing cost savings, coupled with the one-time cost savings discussed above, will provide meaningful burden reduction to smaller institutions that would have been covered at the threshold of 100 open-end lines of credit but will be excluded from open-end reporting under this final rule. Avoiding the imposition of such costs for these affected institutions will also limit any potential for cost increases to borrowers or other disruptions in open-end lending that could result from HMDA coverage, as discussed by some commenters.

For the reasons discussed above, the Bureau amends § 1003.2(g)(1)(v)(B) and comments 2(g)–3 and –5, to set the open-end institutional coverage threshold for depository institutions at 200, effective January 1, 2022.

2(g)(2) Nondepository Financial Institution

HMDA extends reporting responsibilities to certain nondepository institutions, defined as any person engaged for profit in the business of mortgage lending other than a bank, savings association, or credit union.[123] HMDA section 309(a) authorizes the Bureau to adopt an exemption for covered nondepository institutions that are comparable within their respective industries to banks, savings associations, and credit unions with $10 million or less in assets in the previous fiscal year.[124] HMDA sections 303(3)(B) and 303(5) require persons other than banks, savings associations, and credit unions that are ''engaged for profit in the business of mortgage lending'' to report HMDA data. As the Bureau stated in the 2015 HMDA Rule, the Bureau interpreted these provisions, as the Board did, to evince the intent to exclude from coverage institutions that make a relatively small volume of mortgage loans.[125] In the 2015 HMDA Rule, the Bureau interpreted ''engaged for profit in the business of mortgage lending'' to include nondepository institutions that originated at least 25 closed-end mortgage loans or 100 open-end lines of credit in each of the two preceding calendar years. Due to the questions raised about potential risks posed to applicants and borrowers by nondepository institutions and the lack of other publicly available data sources about nondepository institutions, the Bureau believed that requiring additional nondepository institutions to report HMDA data would better effectuate HMDA's purposes. The Bureau estimated in 2015 that these changes to institutional coverage could result in HMDA coverage for up to an additional 450 nondepository institutions. The Bureau stated in the 2015 HMDA Rule its belief that it was important to increase visibility into the lending practices of nondepository institutions because of their history of making riskier loans than depository institutions, including their role in the financial crisis and lack of available data about the mortgage lending practices of lower-volume nondepository institutions. The Bureau also stated that expanded coverage of nondepository institutions would ensure more equal visibility into the practices of nondepository institutions and depository institutions.

For the reasons discussed below, the Bureau has now determined that higher thresholds for closed-end mortgage loans and open-end lines of credit will more appropriately cover nondepository institutions that ''are engaged for profit in the business of mortgage lending'' and maintain visibility into the lending practices of such institutions.

2(g)(2)(ii)(A)

Regulation C implements HMDA's coverage criteria for nondepository institutions in § 1003.2(g)(2). The Bureau revised the coverage criteria for nondepository institutions in the 2015 HMDA Rule by requiring such

[121] As discussed in more detail in part VII below, the Bureau has supplemented its analyses from the May 2019 Proposal with 2018 HMDA data. These data allow the Bureau to develop estimates based on the total number of open-end loan/application register records, rather than the number of open-end originations. As a result, the Bureau has assigned more of the estimated 401 institutions affected by the increase in the threshold from 100 to 200 open-end lines of credit to the tier 2 category and fewer to the tier 3 category as compared to the May 2019 Proposal. This increase in the estimated number of affected tier 2 institutions results in a higher estimated aggregate one-time cost savings associated with the threshold increase than the Bureau's estimate of $3.8 million in the May 2019 Proposal. For information about the HMDA data used in developing and supplementing the Bureau estimates, see *infra* part VII.E.3.

[122] As noted above, as compared to the May 2019 Proposal the Bureau now assigns more of the estimated 401 institutions affected by the increase in the threshold from 100 to 200 to the tier 2 category and fewer to the tier 3 category. As a result, the Bureau's estimated aggregate savings on ongoing operational costs associated with the threshold increase is higher than the Bureau's estimate of $2.1 million in the May 2019 Proposal. For information about the HMDA data used in developing and supplementing the Bureau estimates, see *infra* part VII.E.3.

[123] HMDA section 303(5) (defining ''other lending institutions'').

[124] HMDA section 309(a), 12 U.S.C. 2808(a).

[125] 80 FR 66128, 66153 (Oct. 28, 2015) (citing 54 FR 51356, 51358–59 (Dec. 15, 1989)).

institutions to report HMDA data if they met the statutory location test and exceeded either the closed-end or open-end thresholds.[126] In the May 2019 Proposal, the Bureau proposed to amend § 1003.2(g)(2)(ii)(A) and related commentary to raise the closed-end threshold for nondepository institutions to either 50 or, alternatively, 100 closed-end mortgage loans. For the reasons discussed below, the Bureau is amending § 1003.2(g)(1)(ii)(A) and related commentary to raise the threshold to 100 closed-end mortgage loans.

Background on Closed-End Mortgage Loan Threshold for Institutional Coverage of Nondepository Institutions

After issuing the 2015 HMDA Rule and the 2017 HMDA Rule, the Bureau heard concerns that lower-volume institutions experience significant burden with the current threshold of 25 closed-end mortgage loans.[127] Various industry stakeholders advocated for an increase to the closed-end threshold in order to reduce burden on additional lower-volume financial institutions. In light of the concerns raised by industry stakeholders, the Bureau proposed to raise the closed-end threshold for nondepository institutions and indicated that it was considering whether a higher threshold would more appropriately cover nondepository institutions that ''are engaged for profit in the business of mortgage lending'' and maintain visibility into the lending practices of such institutions. The Bureau sought comment on whether an increase to the threshold would more appropriately balance the benefits and burdens of covering lower-volume nondepository institutions based on their closed-end lending.

The Bureau proposed two alternatives to the closed-end mortgage loan threshold, and both proposed alternatives would have maintained a uniform closed-end threshold for depository and nondepository institutions.[128] The Bureau sought specific comment on how the proposed increase to the closed-end threshold would affect the number of nondepository institutions required to report data on closed-end mortgage loans, the significance of the data that would not be available as a result of the proposed increase to the closed-end threshold, and the reduction in burden that would result from the proposed increase to the closed-end threshold for nondepository institutions that would not be required to report.

Comments Received on Closed-End Threshold for Institutional Coverage for Nondepository Institutions

As mentioned above, commenters typically discussed the closed-end threshold without distinguishing between the threshold applicable to depository institutions under § 1003.2(g)(1)(v)(A) and the threshold applicable to nondepository institutions under § 1003.2(g)(2)(ii)(A). Comments received regarding the Bureau's proposal to increase the closed-end threshold are discussed in more detail in the section-by-section analysis of § 1003.2(g)(1)(v)(A) above.

Final Rule

Pursuant to its authority under HMDA section 305(a), the Bureau is finalizing the closed-end threshold for nondepository institutions at 100 in § 1003.2(g)(1)(ii)(A). The Bureau has considered the comments received in response to the May 2019 Proposal and updated estimates in determining the appropriate threshold. As discussed below, the Bureau believes that it is reasonable to interpret ''engaged for profit in the business of mortgage lending'' to include nondepository institutions that originated at least 100 closed-end mortgage loans in each of the two preceding calendar years and that doing so will effectuate the purposes of HMDA and facilitate compliance. The Bureau believes that increasing the closed-end threshold to 100 will provide meaningful burden relief for lower-volume nondepository institutions while maintaining sufficient reporting to achieve HMDA's purposes. The final rule's uniform loan-volume threshold applicable to depository and nondepository institutions also maintains the simplicity of this aspect of the reporting regime, thereby facilitating compliance.[129]

As explained in the section-by-section analysis of § 1003.2(g)(1)(v)(A) above, a few developments have affected the Bureau's analyses of the costs and benefits associated with the closed-end threshold for depository and nondepository institutions since the 2015 HMDA Rule was issued. The Bureau has gathered extensive information regarding stakeholders' experience with the 2015 HMDA Rule through comments received in this rulemaking and other feedback. As described above, the Bureau has heard that financial institutions have encountered significant burdens in complying with the 2015 HMDA Rule, and the Bureau is particularly concerned about the increased burdens faced by smaller institutions. Additionally, the Bureau now has access to HMDA data from 2018, which was the first year that financial institutions collected data under the 2015 HMDA Rule, and has used these data in updating and confirming the estimates included in this final rule. With the benefit of this additional information about the 2015 HMDA Rule and the new data to supplement the Bureau's analyses, the Bureau is now in a better position to assess both the benefits and burdens of the reporting required under the 2015 HMDA Rule.

The Bureau has considered the appropriate closed-end threshold for nondepository institutions in light of these developments and the comments received. The Bureau determines that the threshold of 100 closed-end mortgage loans for nondepository institutions provides sufficient information on closed-end mortgage lending to serve HMDA's purposes and maintains uniformity with the closed-end threshold for depository institutions established in this rule, while appropriately reducing ongoing costs that smaller nondepository institutions are incurring under the current threshold. These considerations are discussed in turn below, and additional explanation of the Bureau's cost estimates is provided in the Bureau's analysis under Dodd-Frank Act section 1022(b) in part VII.E.2 below.

[126] Prior to the 2015 HMDA Rule, for-profit nondepository institutions that met the location test only had to report if: (1) In the preceding calendar year, the institution originated home purchase loans, including refinancings of home purchase loans, that equaled either at least 10 percent of its loan-origination volume, measured in dollars, or at least $25 million; and (2) On the preceding December 31, the institution had total assets of more than $10 million, counting the assets of any parent corporation; or in the preceding calendar year, the institution originated at least 100 home purchase loans, including refinancings of home purchase loans. 12 CFR 1003.2 (2017).

[127] The Bureau temporarily raised the threshold for open-end lines of credit in the 2017 HMDA Rule because of concerns based on new information that the estimates the Bureau used in the 2015 HMDA Rule may have understated the burden that open-end reporting would impose on smaller institutions if they were required to begin reporting on January 1, 2018. However, the Bureau declined to raise the threshold for closed-end mortgage loans and stated that in developing the 2015 HMDA Rule, it had robust data to make a determination about the number of transactions that would be reported with a threshold of 25 closed-end mortgage loans as well as the one-time and ongoing costs to industry. 82 FR 43088, 43095–96 (Sept. 13, 2017).

[128] For a discussion on the proposed closed-end coverage threshold for depository institutions, see the section-by-section analysis of § 1003.2(g)(1)(v)(A) above.

[129] The 2015 HMDA Rule simplified the reporting regime by establishing a uniform loan-volume threshold applicable to depository and nondepository institutions.

Effect on Market Coverage

Similar to the estimates in the section-by-section analysis of § 1003.2(g)(1)(v)(A), the Bureau developed estimates for nondepository institution coverage at varying thresholds. Using multiple data sources, including recent HMDA data [130] and Call Reports, the Bureau developed estimates for the two thresholds the Bureau proposed in the alternative, 50 and 100, as well as the thresholds of 250 and 500, which many commenters suggested the Bureau consider.[131] These estimates compare coverage under these thresholds to coverage under the current threshold of 25.

Similar to the estimates described above for the closed-end threshold for depository institutions, many of the estimates provided for the closed-end threshold for nondepository institutions differ slightly from the initial estimates provided in the May 2019 Proposal. The estimates in this final rule update the initial estimates provided in the May 2019 Proposal using the 2018 HMDA data, which were not available at the time the Bureau developed the May 2019 Proposal. For the May 2019 Proposal, the Bureau used HMDA data from 2016 and 2017 with a two-year look-back period covering calendar years 2016 and 2017 to estimate potential reporters and projected the lending activities of financial institutions using their 2017 HMDA data as proxies. In generating the updated estimates provided in this final rule, the Bureau used data from 2017 and 2018 with a two-year look-back period covering calendar years 2017 and 2018 to estimate potential reporters and has projected the lending activities of financial institutions using their 2018 data as proxies. In addition, for the estimates provided in the May 2019 Proposal and in this final rule, the Bureau restricted the projected reporters to only those that actually reported data in the most recent year of HMDA data considered (2017 for the May 2019 Proposal and 2018 for this final rule).[132]

Effect on covered nondepository institutions and reportable originations. As discussed above, many commenters opposed increasing the closed-end threshold because of concerns that there would be less data with which to evaluate whether HMDA's statutory purposes are being met. However, the Bureau's analysis indicates that the proposed thresholds of either 50 or 100 closed-end mortgage loans will maintain sufficient reporting to achieve HMDA's purposes.

If the threshold were increased to 50 closed-end mortgage loans, the Bureau estimates that approximately 720 out of approximately 740 nondepository institutions covered under the current threshold of 25 (or approximately 97 percent) would continue to be required to report HMDA data on closed-end mortgage loans. Further, the Bureau estimates that if the threshold were increased from 25 to 50, this would result in about 99.97 percent of closed-end mortgage loan originations currently reported or approximately 3.428 million total closed-end mortgage loan originations, under current market conditions, that would continue to be reported by nondepository institutions.[133]

The Bureau estimates that with the closed-end threshold set at 100 under the final rule, approximately 680 out of approximately 740 nondepository institutions covered under the current threshold of 25 (or approximately 92 percent) will continue to be required to report HMDA data on closed-end mortgage loans. Further, the Bureau estimates that when the final rule increases the threshold to 100, about 99.9 percent of originations of closed-end mortgage loans currently reported or approximately 3.425 million total originations of closed-end mortgage loans reported by nondepository institutions, under current market conditions, will continue to be reported.[134]

The Bureau also generated estimates for closed-end thresholds higher than the ones the Bureau proposed, as many commenters suggested that the Bureau consider thresholds higher than proposed. These estimates reflect the decrease in the number of nondepository institutions that would be required to report HMDA data and the resulting decrease in the HMDA data that would be reported becomes more pronounced at thresholds higher than 100. For example, if the closed-end threshold were set at 250, the Bureau estimates that approximately 590 out of approximately 740 nondepository institutions covered under the current threshold of 25 (or approximately 80 percent) would continue to be required to report HMDA data on closed-end mortgage loans. Further, the Bureau estimates that if the threshold were increased from 25 to 250 loans, this would result in about 99.4 percent of closed-end mortgage loan originations currently reported or approximately 3.408 million total closed-end mortgage loan originations, under current market conditions, that would continue to be reported by nondepository institutions.[135] If the closed-end

[130] The Bureau stated in the May 2019 Proposal that it intended to review the 2018 HMDA data more closely in connection with this rulemaking once the 2018 submissions were more complete. The estimates reflected in this final rule are based on the HMDA data collected in 2017 and 2018 as well as other sources. These estimates are discussed further in the analysis under Dodd-Frank Act section 1022(b) in part VII below.

[131] Except for the estimates provided at the census tract level, the estimates provided for potential thresholds in this section cover only nondepository institutions. Estimates for depository institutions are described in the section-by-section analysis of § 1003.2(g)(1)(v)(A). For estimates that are comprehensive of depository and nondepository institutions, see part VII.E.2 below.

[132] The Bureau recognizes that the coverage estimates generated using this restriction may omit certain financial institutions that should have reported but did not report in the most recent HMDA reporting year. However, the Bureau applied this restriction to ensure that institutions included in its coverage estimates are in fact financial institutions for purposes of Regulation C because it recognizes that institutions might not meet the Regulation C definition of financial institution for reasons that are not evident in the data sources that it utilized.

[133] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 50, about 683 out of about 697 nondepository institutions covered under the current threshold of 25 (or approximately 98 percent) would continue to report HMDA data on closed-end mortgage loans, and over 99 percent or approximately 3.44 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria would continue to be reported. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[134] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 100, about 661 out of about 697 nondepository institutions covered under the current threshold of 25 (or approximately 95 percent) would continue to report HMDA data on closed-end mortgage loans, and over 99 percent or approximately 3.44 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria would continue to be reported. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[135] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 250, about 573 out of about 697 nondepository institutions covered under the current threshold of 25 (or approximately 82 percent) would continue to report HMDA data on closed-end mortgage loans, and about 99 percent or approximately 3.42 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria would continue to be reported. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

threshold were set at 500, the Bureau estimates that approximately 480 out of approximately 740 nondepository institutions covered under the current threshold of 25 (or approximately 65 percent) would continue to be required to report HMDA data on closed-end mortgage loans. Further, the Bureau estimates that if the threshold were increased from 25 to 500 loans, this would result in about 98.2 percent of closed-end mortgage loan originations currently reported or approximately 3.367 million total closed-end mortgage loan originations, under current market conditions, that would continue to be reported by nondepository institutions.[136]

The Bureau recognizes the importance of maintaining data about the lending practices of nondepository institutions. The Bureau also acknowledges the concerns raised by commenters that setting the threshold higher than 25 will result in less data, but the Bureau believes that the modest decrease in data at the threshold of 100 (estimated at less than one percent of data currently reported) will not undermine enforcement of fair lending laws or regulators' ability to identify potentially discriminatory lending through HMDA data. The Bureau believes that retaining approximately 99.9 percent of the data that would be reported under the current threshold of 25 will result in nondepository institutions reporting sufficient HMDA data to enable the public and regulators to monitor risks posed by nondepository institutions.

Effect on HMDA data at the local level. The Bureau recognizes that any loan-volume threshold will affect individual markets differently, depending on the extent to which smaller creditors service individual markets and the market share of those creditors. For the proposal and this final rule, the Bureau reviewed estimates at varying closed-end thresholds to examine the potential effect on available data at the census tract level. The estimates of the effect on reportable HMDA data at the census tract level are discussed in the section-by-section analysis of § 1003.2(g)(1)(v)(A) above. Based on the Bureau's review of the estimates, the Bureau believes that an increase to the closed-end threshold from 25 to 100 will result in sufficient data at the local level, including with respect to rural and low-to-moderate income census tracts, to further HMDA's purposes.

Specific types of data. As mentioned in the section-by-section analysis in § 1003.2(g)(1)(v)(A), a number of commenters expressed concerns about the impact that an increase to the closed-end threshold would have on HMDA data regarding specific types of loan products, such as loans for multifamily housing and manufactured housing. The Bureau believes that data on these types of loan products will still be available at the threshold of 100 set by this final rule. For example, the Bureau estimates that with the closed-end threshold increased from 25 to 100 under the final rule, approximately 87 percent of multifamily loan applications and originations will continue to be reported by depository and nondepository institutions combined, when compared to the current threshold of 25 closed-end mortgage loans in today's market conditions. Regarding the effect on manufactured housing data, the Bureau estimates that at a threshold of 100 closed-end mortgage loans, approximately 96 percent of loans and applications related to manufactured housing will continue to be reported by depository and nondepository institutions combined, when compared to the current threshold of 25 closed-end mortgage loans in today's market conditions. The Bureau's estimates indicate that a significant number of multifamily housing and manufactured housing loans and applications under today's market conditions will continue to be reported under the final rule's threshold of 100.

Ongoing Cost Reduction From Threshold of 100

As noted above, small financial institutions and trade associations commented on the cost of HMDA reporting, suggesting that compliance costs have had an impact on the ability of small financial institutions to serve their communities. For the May 2019 Proposal and this final rule, the Bureau developed estimates for depository and nondepository institutions combined to determine the savings in annual ongoing costs at various thresholds.[137] The Bureau estimates that if the closed-end threshold were set at 50, institutions that originate between 25 and 49 closed-end mortgage loans would save approximately $3.7 million per year in total annual ongoing costs relative to the current threshold of 25.[138] The Bureau estimates that with the threshold of 100 closed-end mortgage loans established by the final rule, institutions that originate between 25 and 99 closed-end mortgage loans will save approximately $11.2 million per year, relative to the current threshold of 25.[139] With a threshold of 250 or 500 closed-end mortgage loans, the Bureau estimates that institutions would save approximately $27.2 million and $45.4 million, respectively, relative to the current threshold of 25.

The Bureau concludes that increasing the closed-end threshold to 100 will provide meaningful burden reduction for lower-volume nondepository institutions, while maintaining sufficient reporting to achieve HMDA's purposes. In the 2015 HMDA Rule, the Bureau expressed concern that if it were to set the threshold higher than 100, the resulting decrease into the visibility of the lending practices of nondepository institutions might hamper the ability of the public and regulators to monitor risks posed to consumers by those nondepository institutions.[140] The Bureau maintains the same concern under this final rule based on its analysis of various closed-end thresholds using more recent estimates. For example, if the Bureau were to set the closed-end threshold for nondepository institutions at 500 as

[136] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 500, about 477 out of about 697 nondepository institutions covered under the current threshold of 25 (or approximately 68 percent) would continue to report HMDA data on closed-end mortgage loans, and about 98 percent or approximately 3.38 million total originations of closed-end mortgage loans in current market conditions reported by depository institutions under the current Regulation C coverage criteria would continue to be reported. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[137] These cost estimates reflect the combined ongoing reduction in costs for depository and nondepository institutions. These estimates also take into account the enactment of the EGRRCPA, which created partial exemptions from HMDA's requirements that certain insured depository institutions and insured credit unions may use, and reflect updates made to the cost estimates since the May 2019 Proposal. See part VII.E.2 below for a more comprehensive discussion of the cost estimates.

[138] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 50, the aggregate savings on the operational costs associated with reporting closed-end mortgage loans would be approximately $2.2 million per year. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[139] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased from 25 to 100, the aggregate savings on the operational costs associated with reporting closed-end mortgage loans would be approximately $8.1 million per year. As explained above and in greater detail in part VII.E.2 below, the differences in the estimates between the May 2019 Proposal and this final rule are mostly due to updates made to incorporate the newly available 2018 HMDA data.

[140] 80 FR 66128, 66281 (Oct. 28, 2015).

suggested by a number of commenters, while an estimated 98.2 percent of closed-end mortgage originations currently reported under today's market conditions would continue to be reported, there would be data reported about the lending patterns of only 65 percent of nondepository institutions that are reporters under the current threshold of 25. The Bureau is concerned that an increase to the closed-end threshold higher than 100 could hamper the ability of the public and regulators to monitor risks posed to consumers by nondepository institutions. In comparison, with the Bureau finalizing the closed-end threshold at 100, an estimated 99.9 percent of nondepository closed-end mortgage originations currently reported under today's market conditions will continue to be reported, and there will be data reported about 92 percent of nondepository institutions relative to the current threshold of 25. The Bureau's estimates suggest that, at the threshold of 100 closed-end mortgage loans established by the final rule, the cost savings for financial institutions will be meaningful while maintaining substantial HMDA data for analysis at the national and local levels.[141]

Based on its analysis, the Bureau believes it is reasonable to interpret ''engaged for profit in the business of mortgage lending'' to include nondepository institutions that originated at least 100 closed-end mortgage loans in each of the two preceding calendar years. The Bureau determines that this final rule's amendments to § 1003.2(g)(2)(ii)(A) will also effectuate the purposes of HMDA by ensuring significant coverage of nondepository mortgage lending. A threshold of 100 closed-end mortgage loans also facilitates compliance with HMDA by reducing burden on smaller institutions and excluding nondepository institutions that are not engaged for profit in the business of mortgage lending. In addition, the final rule's uniform loan-volume threshold applicable to depository and nondepository institutions maintains the simplicity of this aspect of the reporting regime, thereby facilitating compliance.[142] For the reasons stated above, the Bureau is amending § 1003.2(g)(2)(ii)(A) to adjust the closed-end threshold to 100. As discussed in part VI.A below, the change to the closed-end threshold will take effect on July 1, 2020, to provide more immediate relief to affected institutions.[143]

2(g)(2)(ii)(B)

The 2015 HMDA Rule established a coverage threshold of 100 open-end lines of credit in § 1003.2(g)(2)(ii)(B) as part of the definition of nondepository financial institution. As discussed in more detail in the section-by-section analysis of § 1003.2(g)(1)(v)(B) above, the 2017 HMDA Rule amended §§ 1003.2(g)(1)(v)(B) and (g)(2)(ii)(B) and 1003.3(c)(12) and related commentary to raise temporarily the threshold to 500 open-end lines of credit for calendar years 2018 and 2019.[144] In the May 2019 Proposal, the Bureau proposed to extend to January 1, 2022, Regulation C's temporary threshold of 500 open-end lines of credit for institutional and transactional coverage of both depository and nondepository institutions. The Bureau also proposed to increase the permanent threshold from 100 to 200 open-end lines of credit at the end of the extension. In the 2019 HMDA Rule, the Bureau extended for two years the temporary open-end institutional coverage threshold for nondepository institutions in § 1003.2(g)(2)(ii)(B). The Bureau is now finalizing as proposed the increase in the permanent threshold to 200 open-end lines of credit effective January 1, 2022.

As noted above, commenters typically discussed the open-end threshold without distinguishing between the threshold applicable to depository institutions under § 1003.2(g)(1)(v)(B) and the threshold applicable to nondepository institutions under § 1003.2(g)(2)(ii)(B). Comments received regarding the proposed increase in the permanent open-end threshold are discussed in the section-by-section analysis of § 1003.2(g)(1)(v)(B).

According to the Bureau's estimates, nondepository institutions account for only a small percentage of the institutions and loans in the open-end line of credit market.[145] Table 4 in the Bureau's analysis under Dodd-Frank Act section 1022(b) in part VII.E.3 below provides coverage estimates for nondepository institutions at the permanent threshold of 200 open-end lines of credit that the Bureau is finalizing. Under the permanent threshold of 200 open-end lines of credit, the Bureau estimates that about 48,000 open-end lines of credit or approximately 84 percent of nondepository open-end origination volume will be reported by approximately 25 nondepository institutions or about 11 percent of all nondepository institutions providing open-end lines of credit. By comparison, the Bureau estimates that if the permanent threshold were set at 100 open-end lines of credit, about 51,000 lines of credit or approximately 89 percent of nondepository open-end origination volume would be reported by approximately 42 nondepository institutions or about 19 percent of all nondepository institutions providing open-end lines of credit.

For the reasons discussed in the section-by-section analysis of § 1003.2(g)(1)(v)(B), and to ensure the thresholds are consistent for depository and nondepository institutions, the Bureau is finalizing as proposed an increase to Regulation C's permanent open-end threshold upon expiration of the current temporary open-end threshold. This final rule increases to 200 the permanent open-end line of credit threshold for institutional coverage of nondepository institutions in § 1003.2(g)(2)(ii)(B) effective January 1, 2022. This amendment to the open-end threshold for institutional coverage of nondepository institutions in § 1003.2(g)(2)(ii)(B) conforms to the amendments that the Bureau is finalizing with respect to the permanent open-end threshold for institutional coverage of depository institutions in § 1003.2(g)(1)(v)(B) and the permanent open-end threshold for transactional coverage in § 1003.3(c)(12).

Pursuant to its authority under HMDA section 305(a) as discussed above, the Bureau is finalizing an increase to the permanent threshold for open-end lines of credit in § 1003.2(g)(2)(ii)(B). Based on its analysis, the Bureau believes it is reasonable to interpret ''engaged for profit in the business of mortgage lending'' to include nondepository institutions that originated at least 200 open-end lines of credit in each of the two preceding calendar years. The Bureau determines that this final rule's amendments to § 1003.2(g)(2)(ii)(B) will also effectuate the purposes of HMDA by ensuring significant coverage of nondepository mortgage lending. This increase to the permanent threshold also facilitates compliance with HMDA by reducing burden on smaller institutions and excluding nondepository institutions that are not engaged for

[141] These cost estimates reflect the combined ongoing reduction in costs for depository and nondepository institutions. These estimates also take into account the enactment of the EGRRCPA, which created partial exemptions from HMDA's requirements that certain insured depository institutions and insured credit unions may now use. See part VII.E.2 below for a more comprehensive analysis on cost estimates.

[142] The 2015 HMDA Rule established the uniform loan-volume threshold applicable to depository and nondepository institutions to simplify the reporting regime.

[143] See section VI for a discussion of the effective dates.

[144] 82 FR 43088, 43095 (Sept. 13, 2017).

[145] *See infra* part VII.E.3 at table 4.

profit in the business of mortgage lending. The Bureau determines that the reasons provided for changing the permanent threshold for depository institutions in the section-by-section analysis of § 1003.2(g)(1)(v)(B) above apply to the permanent threshold for nondepository institutions as well. Additionally, the increase in the permanent threshold in § 1003.2(g)(2)(ii)(B) to 200 open-end lines of credit will promote consistency, and thereby facilitate compliance, by subjecting nondepository institutions to the same threshold that applies to the depository institutions that make up the majority of the open-end line of credit market.

Section 1003.3 Exempt Institutions and Excluded and Partially Exempt Transactions

3(c) Excluded Transactions

3(c)(11)

Section 1003.3(c)(11) provides an exclusion from the requirement to report closed-end mortgage loans for institutions that originated fewer than 25 closed-end mortgage loans in either of the two preceding calendar years. This transactional coverage threshold complements the closed-end mortgage loan reporting threshold included in the definition of financial institution in § 1003.2(g). In the May 2019 Proposal, the Bureau proposed to increase Regulation C's closed-end threshold for institutional and transactional coverage from 25 to either 50 or 100. Comments regarding the proposed increase to the closed-end coverage threshold are discussed in the section-by-section analysis of § 1003.2(g)(1)(v)(A). For the reasons discussed in the section-by-section analysis of § 1003.2(g)(1)(v)(A), the Bureau is now increasing Regulation C's closed-end threshold for institutional and transactional coverage from 25 to 100. Therefore, the Bureau is finalizing the amendments it proposed to § 1003.3(c)(11) and comments 3(c)(11)–1 and –2 to increase the closed-end threshold for transactional coverage from 25 to 100, with minor clarifying changes.[146] These amendments conform to the related changes the Bureau is finalizing with respect to the closed-end threshold for institutional coverage in § 1003.2(g).

Although not part of the May 2019 Proposal, the Bureau is also finalizing additional related amendments to § 1003.3(c)(11) and comment 3(c)(11)–2 to ensure that institutions affected by the threshold increase have the option to report data collected in 2020 should they choose to do so. As discussed in part VI.A below, the change to the closed-end threshold will take effect on July 1, 2020. The Bureau selected this effective date to ensure that the relief provided in this final rule is available quickly to affected institutions, after a number of industry commenters expressed support for a mid-year effective date. However, a number of commenters also noted that institutions may have difficulty making changes to their HMDA operations and might need time to implement changes in response to the final rule. For example, a State trade association that expressed support for a mid-year effective date noted that there may be operational issues that make it difficult for institutions to avail themselves of the threshold increase in mid-year and requested that the Bureau allow a transition period for any institution that may need additional time. The Bureau also recognizes that, since 2020 data collection is already underway, some affected institutions may wish to report the HMDA data that they have collected. The Bureau believes that voluntary reporting of 2020 closed-end data from such institutions would be beneficial to the HMDA dataset, as long as the data are submitted for the entire calendar year.

The Bureau is amending § 1003.3(c)(11) and comment 3(c)(11)–2 to allow institutions newly excluded by the final rule the option to report their 2020 closed-end data. Specifically, the Bureau is amending § 1003.3(c)(11) to clarify that, for purposes of information collection in 2020, ''financial institution'' as used in the discussion of optional reporting in § 1003.3(c)(11) includes an institution that was a financial institution as of January 1, 2020. Thus, for purposes of information collection in 2020, an institution that was a financial institution as of January 1, 2020, may collect, record, report, and disclose information, as described in §§ 1003.4 and .5, for closed-end mortgage loans excluded under § 1003.3(c)(11), as though they were covered loans, provided that the institution complies with such requirements for all applications for closed-end mortgage loans that it receives, closed-end mortgage loans that it originates, and closed-end mortgage loans that it purchases that otherwise would have been covered loans during calendar year 2020. The amendment to comment 3(c)(11)–2 clarifies that an institution that was a financial institution as of January 1, 2020, but is not a financial institution on July 1, 2020, because it originated fewer than 100 closed-end mortgage loans in either 2018 or 2019 is not required in 2021 to report, but may report, applications for, originations of, or purchases of closed-end mortgage loans for calendar year 2020 that are excluded transactions because the institution originated fewer than 100 closed-end mortgage loans in either 2018 or 2019. The amendment to comment 3(c)(11)–2 further clarifies that an institution that was a financial institution as of January 1, 2020, and chooses to report such excluded applications for, originations of, or purchases of closed-end mortgage loans in 2021 must report all such applications for closed-end mortgage loans that it receives, closed-end mortgage loans that it originates, and closed-end mortgage loans that it purchases that otherwise would be covered loans for all of calendar year 2020. These amendments thus permit an institution that was a financial institution as of January 1, 2020, but is not a financial institution on July 1, 2020, because it originated fewer than 100 closed-end mortgage loans in either 2018 or 2019 to report voluntarily in 2021 its closed-end HMDA data collected in 2020, as long as the institution reports such closed-end data for the full calendar year 2020.[147] The Bureau believes that these amendments are appropriate to ensure that institutions newly excluded by the mid-year increase in the closed-end threshold in this final rule have the option to report their 2020 closed-end data should they choose to do so.

As explained in part VI below, the amendments to increase the closed-end threshold, including the amendments to § 1003.3(c)(11) and comment 3(c)(11)–2 permitting optional reporting of data collected in 2020, take effect on July 1, 2020. Because the deadline for reporting of data collected in 2020 (voluntary or otherwise) is March 1, 2021, the amendments to § 1003.3(c)(11) and comment 3(c)(11)–2 relating to optional reporting of data collected in 2020 will no longer be necessary after 2021. To streamline Regulation C, the final rule therefore removes these amendments effective January 1, 2022.

3(c)(12)

As adopted in the 2015 HMDA Rule, § 1003.3(c)(12) provides an exclusion

[146] In light of the new closed-end and open-end thresholds adopted in this final rule, the final rule makes minor changes in comment 3(c)(11)–1 to adjust the years and loan volumes in examples that illustrate how the thresholds work.

[147] Section 1003.3(c)(11) (both currently and as revised) and comment 3(c)(11)–2 permit a financial institution whose closed-end mortgage loans are excluded by § 1003.3(c)(11) to report voluntarily its closed-end data, as long as the financial institution reports such closed-end data for the full calendar year.

from the requirement to report open-end lines of credit for institutions that did not originate at least 100 such loans in each of the two preceding calendar years. This transactional coverage threshold complements the open-end threshold included in the definition of financial institution in § 1003.2(g), which sets forth Regulation C's institutional coverage. The 2017 HMDA Rule replaced ''each'' with ''either'' in § 1003.3(c)(11) and (12) to correct a drafting error and to ensure that the exclusions provided in § 1003.3(c)(11) and (12) mirror the loan-volume thresholds for financial institutions in § 1003.2(g).[148] As discussed in more detail in the section-by-section analysis of § 1003.2(g), in the 2017 HMDA Rule the Bureau also amended §§ 1003.2(g) and 1003.3(c)(12) and related commentary to raise temporarily the open-end threshold in those provisions to 500 lines of credit for calendar years 2018 and 2019.[149] In the May 2019 Proposal, the Bureau proposed to extend to January 1, 2022, Regulation C's current temporary open-end threshold for institutional and transactional coverage of 500 open-end lines of credit and then to increase the permanent threshold from 100 to 200 open-end lines of credit upon the expiration of the proposed extension of the temporary threshold. The Bureau stated in the 2019 HMDA Rule that it intended to address in a separate final rule in 2020 the May 2019 Proposal's proposed amendment to the permanent threshold for open-end lines of credit. Comments regarding the proposed permanent increase in the open-end threshold are discussed in the section-by-section analysis of § 1003.2(g)(1)(v)(B) above.

For the reasons discussed in the section-by-section analysis of § 1003.2(g)(1)(v)(B), the Bureau is now finalizing as proposed the increase in the permanent threshold to 200 open-end lines of credit, effective January 1, 2022. To align the permanent increase in the open-end threshold for institutional coverage in § 1003.2(g) with the transactional coverage threshold, the Bureau is also finalizing the permanent increase in the open-end threshold for transactional coverage in § 1003.3(c)(12) and comments 3(c)(12)–1 and –2, as proposed, with minor changes for clarity.[150]

[148] 82 FR 43088, 43102 (Sept. 13, 2017).

[149] *Id.* at 43095.

[150] In addition to finalizing the proposed changes to comment 3(c)(12)–1, the final rule makes minor changes in comment 3(c)(12)–1 to adjust the years and loan volumes in an example that illustrates how the open-end line of credit threshold works.

VI. Effective Dates

In consideration of comments received and for the reasons discussed below, the Bureau is finalizing the increase in the closed-end threshold to 100 effective July 1, 2020,[151] and the adjustment to the permanent open-end threshold to 200 effective January 1, 2022, when the current temporary open-end threshold expires.[152]

A. Closed-End Threshold

In the May 2019 Proposal, the Bureau proposed to amend §§ 1003.2(g)(1)(v)(A) and (g)(2)(ii)(A) and 1003.3(c)(11) and related commentary to raise the closed-end threshold for institutional and transactional coverage effective January 1, 2020. In the July 2019 Reopening Notice the agency issued in 2019, the Bureau explained that, due to the reopening of the comment period on the closed-end threshold, it would not be possible to finalize any change to the closed-end threshold in time to take effect on the Bureau's originally proposed effective date of January 1, 2020. The Bureau therefore requested additional comment on the appropriate effective date for any change to the closed-end threshold, should the Bureau decide to finalize a change. The Bureau specifically requested comment on the costs and benefits of a mid-year effective date during 2020 versus a January 1, 2021 effective date. With respect to the alternative of a mid-year effective date during 2020, the Bureau also requested comment on the costs and benefits of specific days of the week or times of the month, quarter, or year for a new closed-end threshold to take effect and whether there are any other considerations that the Bureau should address in a final rule if it were to adopt a mid-year effective date.

Most commenters did not address the effective date question, and those that did expressed differing views. A number of banks requested an immediate effective date upon publication of the final rule and requested elimination of any reporting requirement for 2020 data collected prior to that date to provide more immediate regulatory relief. These commenters also asked that the Bureau clarify in the final rule that applications taken prior to a mid-year effective date, which would no longer be HMDA reportable after the threshold increase but for which demographic information was collected, do not violate the demographic collection rules in Regulations B and C. In a joint comment letter, a group of trade associations urged the Bureau to finalize the rule before March 1, 2020 (the deadline for reporting data that financial institutions collected in 2019) and have it take immediate or even retroactive effect. A State trade association that supports a mid-year effective date noted that there may be operational issues that make it difficult for institutions to avail themselves of the threshold increase in mid-year and requested that the Bureau allow a transition for any institution that may need additional time. Other commenters, including at least one bank, a State credit union league, and a joint comment submitted on behalf of consumer groups, civil rights groups, and other organizations, favored a January 1, 2021 effective date. These commenters noted that institutions may have difficulty making changes quickly and that implementing changes at the beginning of the year makes data more consistent and minimizes confusion.

The Bureau has considered the comments received and concludes that a mid-year effective date for the closed-end threshold is appropriate to provide burden relief quickly to institutions that would have to report under the threshold of 25 closed-end mortgage loans but will not have to report under the threshold of 100 closed-end mortgage loans.[153] The amendments relating to the closed-end threshold in §§ 1003.2(g)(1)(v)(A) and (g)(2)(ii)(A) and 1003.3(c)(11) and related commentary are effective on July 1, 2020.[154] Thus, in calendar year 2020, an institution could have been subject to HMDA's closed-end requirements as of January 1, 2020 because it originated at least 25 closed-end mortgage loans in 2018 and 2019 and meets all of the other requirements under § 1003.2(g), but no longer subject to HMDA's closed-end requirements as of July 1, 2020 (a newly excluded institution) because it originated fewer than 100 closed-end

[151] As explained below, institutions that are subject to HMDA's closed-end requirements prior to the effective date but that do not meet the new closed-end threshold for calendar year 2020 as of July 1, 2020 are relieved of the obligation to collect, record, and report data for their 2020 closed-end mortgage loans effective July 1, 2020.

[152] As explained below, the amendments to the open-end threshold apply to covered loans and applications with respect to which final action is taken beginning on January 1, 2022.

[153] The Bureau declines, however, the suggestion of some commenters that the rule should take immediate or even retroactive effect. The Bureau believes that the roughly 75-day period between the final rule's issuance and effective date will provide time for affected institutions to review the final rule and adjust their operations in accordance with it.

[154] As explained below, the final rule also reverses the amendments relating to optional reporting of 2020 data in § 1003.3(c)(11) and comment 3(c)(11)–2 effective January 1, 2022 because those amendments will have become obsolete by that time.

mortgage loans during 2018 or 2019. The final rule relieves newly excluded institutions of the obligation to collect, record, and report data for their 2020 closed-end mortgage loans effective July 1, 2020. Newly excluded institutions may cease collecting 2020 data for closed-end mortgage loans as of July 1, 2020. Pursuant to § 1003.4(f), newly excluded institutions must still record data on a loan/application register for the first quarter of 2020 by 30 calendar days after the end of the first quarter. They will not, however, be required to record closed-end data for the second quarter of 2020 because the deadline under § 1003.4(f) for recording such data falls after July 1, 2020. Because newly excluded institutions collecting HMDA data in 2020 would not otherwise report those data until early 2021, the final rule also relieves newly excluded institutions of the obligation to report by March 1, 2021 data collected in 2020 on closed-end mortgage loans (including closed-end data collected in 2020 before July 1, 2020).

The Bureau appreciates that some newly excluded institutions will need to continue to collect certain data due to other regulatory requirements or may wish to continue collecting data for other reasons. For example, Regulation B includes an independent requirement to collect information regarding the applicant's ethnicity, race, sex, marital status, and age where the credit sought is primarily for the purchase or refinancing of a dwelling that is or will be the applicant's principal residence and will secure the credit.[155] Institutions may also decide to continue collecting after the effective date for other reasons—for example, in order to assess whether they will be subject to HMDA data collection requirements in 2021 or to continue monitoring their own operations. As noted above, some commenters indicated that many smaller institutions might not be able to change their collection practices quickly.

To accommodate such institutions, the amendments to § 1003.3(c)(11) and comment 3(c)(11)–2 permit an institution that was a financial institution as of January 1, 2020 but is not a financial institution on July 1, 2020 because it originated fewer than 100 closed-end mortgage loans in 2018 or 2019 to report voluntarily in 2021 its closed-end HMDA data collected in 2020, as long as the institution reports such closed-end data for the full calendar year 2020.[156] These changes take effect with the other closed-end changes on July 1, 2020 and are discussed in more detail in the section-by-section analysis of § 1003.3(c)(11). Because the deadline for reporting of 2020 data (voluntary or otherwise) is in 2021, the final rule also removes the amendments to § 1003.3(c)(11) and comment 3(c)(11)–2 relating to optional reporting of 2020 data effective January 1, 2022.

As noted above, a number of industry commenters asked that the Bureau clarify in its final rule that applications taken prior to a mid-year effective date, which would no longer be HMDA reportable after the threshold increase but for which demographic information was collected, do not violate the rules governing demographic information collection in Regulations B and C. Newly excluded institutions do not violate Regulation B or C by collecting demographic information about applicants before the effective date in accordance with their legal obligations under Regulation C as that regulation is in effect before the effective date. As noted above, even after the effective date, creditors will still be required under Regulation B to collect information regarding ethnicity, race, sex, marital status, and age where the credit sought is primarily for the purchase or refinancing of a dwelling that is or will be the applicant's principal residence and will secure the credit.[157] The Bureau recognizes that some newly excluded institutions may also continue collecting demographic information for other loans in 2020 after the effective date—for example, if they need additional time to update their systems and forms and to retrain employees or if they decide to continue collecting for the full year and report 2020 data voluntarily in accordance with § 1003.3(c)(11) and comment 3(c)(11)–2. Although Regulation B, 12 CFR 1002.5(b), prohibits creditors from inquiring about the race, color, religion, national origin, or sex of a credit applicant except under certain circumstances, the Bureau notes that even after the effective date, applicable exceptions in Regulation B will permit newly excluded institutions[158] to collect information in 2020 about the ethnicity, race, and sex of applicants for loans that would have been covered loans absent this final rule.[159]

B. Open-End Threshold

In the May 2019 Proposal, the Bureau proposed to amend §§ 1003.2(g)(1)(v)(B) and (g)(2)(ii)(B) and 1003.3(c)(12) and related commentary to extend to January 1, 2022, the current temporary open-end threshold of 500 open-end lines of credit and then to set the threshold permanently at 200 open-end lines of credit beginning in calendar year 2022. In the 2019 HMDA Rule, the Bureau finalized as proposed the two-year extension of the temporary open-end threshold, effective January 1, 2020. In this final rule the Bureau is adjusting the permanent open-end threshold to 200 open-end lines of credit. For these amendments, the Bureau is finalizing the effective date of January 1, 2022, as proposed, to coincide with the expiration of the current temporary open-end threshold of 500 open-end lines of credit. As explained below, the amendments to the open-end threshold apply to covered loans and applications with respect to which final action is taken beginning January 1, 2022.

Consistent with feedback provided by industry stakeholders in connection with the 2015 HMDA Rule and the 2017 HMDA Rule, a number of commenters indicated in response to the May 2019 Proposal that a long implementation period is necessary when coverage changes result in new institutions

[155] 12 CFR 1002.13.

[156] Section 1003.3(c)(11) and comment 3(c)(11)–2 (both currently and as revised) permit a financial institution whose closed-end mortgage loans are excluded by § 1003.3(c)(11) to report voluntarily its closed-end data, as long as the financial institution reports such closed-end data for the full calendar year.

[157] 12 CFR 1002.13.

[158] As used here, a newly excluded institution means an institution that was subject to HMDA's closed-end requirements as of January 1, 2020 because it originated at least 25 closed-end mortgage loans in 2018 and 2019 and met all of the other requirements under § 1003.2(g) but is no longer subject to HMDA's closed-end requirements as of July 1, 2020 due to the final rule's change to the closed-end threshold.

[159] For example, § 1002.5(a)(4)(iii) permits creditors that submitted HMDA data for any of the preceding five calendar years but that are not currently a financial institution to collect information regarding the ethnicity, race, and sex of applicants for loans that would otherwise be covered loans if not excluded by § 1003.3(c)(11) or (12). Section 1002.5(a)(4)(i) permits creditors that are currently financial institutions due to their open-end originations to collect information regarding the ethnicity, race, and sex of an applicant for a closed-end mortgage loan that is an excluded transaction under § 1003.3(c)(11) if they either: (1) Report data concerning such closed-end mortgage loans and applications, or (2) reported closed-end HMDA data for any of the preceding five calendar years. Additionally, § 1002.5(a)(4)(iv) permits a ''creditor that exceeded an applicable loan volume threshold in the first year of the two-year threshold period provided in 12 CFR 1003.2(g), 1003.3(c)(11), or 1003.3(c)(12)'' to collect in the second year information regarding the ethnicity, race, and sex of an applicant for a loan that would otherwise be a covered loan if not excluded by § 1003.3(c)(11) or (12). In the unusual circumstances present here, where Regulation C's closed-end threshold is changing in the middle of 2020, the Bureau interprets ''an applicable loan volume threshold'' as used in § 1002.5(a)(4)(iv) to include, even after the July 1, 2020 effective date, 25 closed-end mortgage loans for the year 2019 during the 2019–2020 period.

having reporting obligations under HMDA. A few trade associations and industry commenters suggested the Bureau adopt a transition period or good-faith efforts standard for compliance with HMDA requirements in consultation with other regulators.

The Bureau determines that the period of more than 20 months between this final rule's issuance and the January 1, 2022 effective date for the adjustment to the open-end threshold will provide newly covered financial institutions with sufficient time to revise and update policies and procedures, implement any necessary systems changes, and train staff before beginning to collect open-end data in 2022. As the Bureau explained in the 2019 HMDA Rule, the two-year extension of the temporary threshold of 500 open-end lines of credit ensures that institutions that will be required to report under the new permanent threshold that takes effect in 2022 will have time to adapt their systems and prepare for compliance.

Under the permanent open-end threshold of 200 open-end lines of credit, beginning in calendar year 2022, financial institutions that originated at least 200 open-end lines of credit in each of the two preceding calendar years must collect and record data on their open-end lines of credit pursuant to § 1003.4 and report such data by March 1 of the following calendar year pursuant to § 1003.5(a)(i). As noted above, this requirement applies to covered loans and applications with respect to which final action is taken on or after January 1, 2022. For example, if a financial institution described in § 1003.2(g) originated at least 200 open-end lines of credit each year in 2020 and 2021 and takes final action on an application for an open-end line of credit on February 15, 2022, the financial institution must collect and record data on that application and report such data by March 1, 2023. This is true regardless of when the financial institution received the application.[160] However, if an institution originated fewer than 200 open-end lines of credit in either of the two preceding calendar years, that institution is not required to collect, record, or report data on its open-end lines of credit for that calendar year. For example, if an institution originated at least 200 open-end lines of credit in 2020 but fewer than 200 open-end lines of credit in 2021, that institution does not need to collect, record, or report any data on open-end lines of credit for which it takes final action in 2022.

VII. Dodd-Frank Act Section 1022(b) Analysis

The Bureau has considered the potential benefits, costs, and impacts of the final rule.[161] In developing the final rule, the Bureau has consulted with or offered to consult with the prudential regulators (the Board, the Federal Deposit Insurance Corporation (FDIC), the National Credit Union Administration, and the Office of the Comptroller of the Currency), the Department of Agriculture, the Department of Housing and Urban Development (HUD), the Department of Justice, the Department of the Treasury, the Department of Veterans Affairs, the Federal Housing Finance Agency, the Federal Trade Commission, and the Securities and Exchange Commission regarding, among other things, consistency with any prudential, market, or systemic objectives administered by such agencies.

As discussed in greater detail elsewhere throughout this supplementary information, in this rulemaking the Bureau is amending Regulation C, effective July 1, 2020, to increase the threshold for reporting data about closed-end mortgage loans to 100 originated closed-end mortgage loans in each of the two preceding years. In addition, the Bureau is amending Regulation C to set the open-end threshold at 200 originated open-end lines of credit in each of the two preceding years beginning in calendar year 2022.

A. Provisions To Be Analyzed

The final rule contains regulatory or commentary language (provisions). The discussion below considers the benefits, costs, and impacts of the following sets of major provisions of the final rule to:

1. Increase the threshold for reporting data about closed-end mortgage loans from 25 to 100 originations in each of the two preceding calendar years, effective July 1, 2020; and

2. Set the threshold for reporting data about open-end lines of credit at 200 originations in each of the two preceding calendar years, effective January 1, 2022.

With respect to each major provision, the discussion below considers the benefits, costs, and impacts to consumers and covered persons. The discussion also addresses comments the Bureau received on the proposed Dodd-Frank Act section 1022(b) analysis, as well as certain other comments on the benefits or costs of the relevant provisions of the May 2019 Proposal that the Bureau is finalizing in this rule, when doing so is helpful to understanding the Dodd-Frank Act section 1022(b) analysis. Some commenters that mentioned the benefits or costs of a provision of the May 2019 Proposal in the context of commenting on the merits of that provision are addressed in the relevant section-by-section analysis, above. In this respect, the Bureau's discussion under Dodd-Frank Act section 1022(b) is not limited to this discussion in part VII of the final rule.

B. Baselines for Consideration of Costs and Benefits

The Bureau has discretion in any rulemaking to choose an appropriate scope of analysis with respect to potential benefits, costs, and impacts and an appropriate baseline.

For the purposes of this analysis, references to the ''first set of provisions'' in this final rule are to those that increase the threshold for reporting data about closed-end mortgage loans from 25 to 100 originations in each of the two preceding calendar years, effective July 1, 2020. Under current Regulation C, absent this final rule, financial institutions that originated no fewer than 25 closed-end mortgage loans in each of the two preceding calendar years and meet other reporting criteria are required to report their closed-end activity under HMDA; furthermore, depository institutions and credit unions that originated fewer than 500 closed-end mortgage loans in each of the two preceding calendar years are generally exempt under the EGRRCPA from reporting certain data points under HMDA. That is the baseline adopted for this set of provisions throughout the analyses presented below.

For the purposes of this analysis, references to the ''second set of provisions'' in this final rule are to those that set the threshold for reporting data about open-end lines of credit at 200 originations in each of the two preceding calendar years, effective January 1, 2022. In the 2019 HMDA Rule, the Bureau granted two-year temporary relief (specifically, for 2020 and 2021) for financial institutions that did not originate at least 500 open-end lines of credit in each of the two

[160] The Bureau understands that final action taken on an application may occur in a different year than the application date.

[161] Specifically, section 1022(b)(2)(A) of the Dodd-Frank Act calls for the Bureau to consider the potential benefits and costs of a regulation to consumers and covered persons, including the potential reduction of access by consumers to consumer financial products or services; the impact on depository institutions and credit unions with $10 billion or less in total assets as described in section 1026 of the Dodd-Frank Act; and the impact on consumers in rural areas.

preceding calendar years. The 2019 HMDA Rule provides that, absent any future rulemaking, the open-end threshold will revert to 100 open-end lines of credit starting in 2022, as established in the 2015 HMDA Rule. This final rule sets the threshold for reporting data about open-end lines of credit at 200 originations in each of the two preceding calendar years, effective January 1, 2022. Meanwhile, the EGRRCPA's partial exemption for open-end lines of credit of eligible insured depository institutions and insured credit unions took effect on May 24, 2018. Therefore, for the consideration of benefits and costs of this second set of provisions the Bureau is adopting a baseline in which the open-end threshold starting in year 2022 is reset at 100 open-end lines of credit in each of the two preceding calendar years, with some depository institutions and credit unions partially exempt under the EGRRCPA.

The Bureau notes that the May 2019 proposal's analysis relied on three separate baselines for each of the three sets of provisions in the proposal. With regard to the provision to increase the closed-end threshold from 25 to 100, the Bureau had explained that the appropriate baseline for this provision is a post-EGRRCPA world in which eligible financial institutions under the EGRRCPA are already partially exempt from the reporting of certain data points for closed-end mortgage loans. And with regard to the provision to set the permanent open-end threshold at 200, the Bureau had adopted a baseline in which the open-end coverage threshold starting in year 2020 is reset at 100 open-end lines of credit in each of the two preceding calendar years with some depository institutions and credit unions partially exempt under the EGRRCPA. But for the purpose of this final rule, with the 2019 HMDA Rule already having incorporated the EGRRCPA changes and finalized the two-year extension of the temporary open-end threshold, the Bureau can simplify by using a baseline that includes the 2019 HMDA Rule for the two provisions being finalized now, with the closed-end analysis using July 1, 2020 as the baseline, and the open-end analysis using January 1, 2022 as the baseline.

C. Coverage of the Final Rule

Both sets of provisions relieve certain financial institutions from HMDA's requirements for data points regarding closed-end mortgage loans or open-end lines of credit that they originate or purchase, or for which they receive applications, as described further in each section below. The final rule affects all financial institutions below certain thresholds as discussed in detail below.

D. Basic Approach of the Bureau's Consideration of Benefits and Costs and Data Limitations

This discussion relies on data that the Bureau has obtained from industry, other regulatory agencies, and publicly available sources. However, as discussed further below, the Bureau's ability to fully quantify the potential costs, benefits, and impacts of this final rule is limited in some instances by a scarcity of necessary data.

1. Benefits to Covered Persons

This final rule relates to the institutions and transactions that are excluded from HMDA's reporting requirements. Both sets of provisions in this final rule will reduce the regulatory burdens on covered persons while also decreasing the data reported to serve the statute's purposes. Therefore, the benefits of these provisions to covered persons are mainly the reduction of the costs to covered persons relative to the compliance costs the covered persons would have to incur under each baseline scenario.

The Bureau's 2015 HMDA Rule, as well as the 2014 proposed rule for the 2015 HMDA Rule and the material provided to the Small Business Review Panel leading to the 2015 HMDA Rule, presented a basic framework of analyzing compliance costs for HMDA reporting, including ongoing costs and one-time costs for financial institutions. Based on the Bureau's then study of the HMDA compliance process and costs, with the help of additional information gathered and verified through the Small Business Review Panel process, the Bureau classified the operational activities that financial institutions use for HMDA data collection and reporting into 18 discrete compliance ''tasks'' which can be grouped into four ''primary tasks.'' [162] Recognizing that the cost per loan of complying with HMDA's requirements differs by financial institution, the Bureau further identified seven key dimensions of compliance operations that were significant drivers of compliance costs, including the reporting system used, the degree of system integration, the degree of system automation, the compliance program, and the tools for geocoding, performing completeness checks, and editing. The Bureau found that the compliance operations of financial institutions tended to have similar levels of complexity across all seven dimensions. For example, if a given financial institution had less system integration, then it tended to use less automation and less complex tools for geocoding. Financial institutions generally did not use less complex approaches on one dimension and more complex approaches on another. The small entity representatives validated this perspective during the Small Business Review Panel meeting convened under the Small Business Regulatory Enforcement Fairness Act.[163]

The Bureau realizes that costs vary by institution due to many factors, such as size, operational structure, and product complexity, and that this variance exists on a continuum that is impossible to fully represent. To consider costs in a practical and meaningful way, in the 2015 HMDA Rule the Bureau adopted an approach that focused on three representative tiers of financial institutions. In particular, to capture the relationships between operational complexity and compliance cost, the Bureau used the seven key dimensions noted above to define three broadly representative financial institutions according to the overall level of complexity of their compliance operations. Tier 1 denotes a representative financial institution with the highest level of complexity, tier 2 denotes a representative financial institution with a moderate level of complexity, and tier 3 denotes a representative financial institution with the lowest level of complexity. For each tier, the Bureau developed a separate set of assumptions and cost estimates.

Table 1 below provides an overview of all three representative tiers across the seven dimensions of compliance operations: [164]

[162] These tasks include: (1) Data collection: Transcribing data, resolving reportability questions, and transferring data to HMDA Management System (HMS); (2) Reporting and resubmission: Geocoding, standard annual edit and internal checks, researching questions, resolving question responses, checking post-submission edits, filing post-submission documents, creating modified loan/application register, distributing modified loan/application register, distributing disclosure statement, and using vendor HMS software; (3) Compliance and internal audits: Training, internal audits, and external audits; and (4) HMDA-related exams: Examination preparation and examination assistance.

[163] *See* Bureau of Consumer Fin. Prot., ''Final Report of the Small Business Review Panel on the CFPB's Proposals Under Consideration for the Home Mortgage Disclosure Act (HMDA) Rulemaking'' 22, 37 (Apr. 24, 2014), *http://files.consumerfinance.gov/f/201407_cfpb_report_hmda_sbrefa.pdf.*

[164] The Bureau notes this description has taken into account the operational improvements the Bureau has implemented regarding HMDA reporting since issuing the 2015 HMDA Rule and differs slightly from the original taxonomy in the

Continued

TABLE 1—TYPES OF HMDA REPORTERS [1]

	Tier 3 FIs tend to . . .	Tier 2 FIs tend to . . .	Tier 1 FIs tend to . . .
Systems	Enter data in Excel loan/application register Formatting Tool.	Use LOS and HMS; Submit data via the HMDA Platform.	Use multiple LOS, central SoR, HMS; Submit data via the HMDA Platform.
Integration	(None)	Have forward integration (LOS to HMS).	Have backward and forward integration; Integration with public HMDA APIs.
Automation	Manually enter data into loan/application register Formatting Tool; review and verify edits in the HMDA Platform.	Loan/application register file produced by HMS; review edits in HMS and HMDA platform; verify edits via HMDA Platform.	Loan/application register file produced by HMS; high automation compiling file and reviewing edits; verify edits via the HMDA platform.
Geocoding	Use FFIEC tool (manual)	Use batch processing	Use batch processing with multiple sources.
Completeness Checks.	Check in HMDA Platform only	Use LOS, which includes completeness checks.	Use multiple stages of checks.
Edits	Use FFIEC Edits only	Use FFIEC and customized edits	Use FFIEC and customized edits run multiple times.
Compliance Program	Have a joint compliance and audit office.	Have basic internal and external accuracy audit.	Have in-depth accuracy and fair lending audit.

[1] FI is ''financial institution''; LOS is ''Loan Origination System''; HMS is ''HMDA Data Management Software''; SoR is ''System of Record.''

For a representative institution in each tier, in the 2015 HMDA Rule the Bureau produced a series of estimates of the costs of compliance, including the ongoing costs that financial institutions incurred prior to the implementation of the 2015 HMDA Rule, and the changes to the ongoing costs due to the 2015 HMDA Rule. The Bureau further provided the breakdown of the changes to the ongoing costs due to each major provision in the 2015 HMDA Rule, which includes the changes to the scope of the institutional coverage, the change to the scope of the transactional coverage, the revisions to the existing data points (as before the 2015 HMDA Rule) and the addition of new data points by the 2015 HMDA Rule.

For the impact analysis in this final rule, the Bureau is utilizing the cost estimates provided in the 2015 HMDA Rule for the representative financial institution in each of the three tiers, with some updates, mainly to reflect the inflation rate. In addition, for the financial institutions eligible for partial exemptions under the EGRRCPA, the Bureau is making updates to align the partially exempt data points (and data fields used to report these data points) with the cost impact analyses discussed in the impact analyses for the 2015 HMDA Rule. The Bureau's analyses below also take into account the operational improvements that have been implemented by the Bureau regarding HMDA reporting since the issuance of the 2015 HMDA Rule. The details of such analyses are contained in the following sections addressing the two sets of provisions of this final rule.

The Bureau received a number of comments relating to the benefits to covered persons of the May 2019 Proposal, both in response to the original proposal and in response to the July 2019 Reopening Notice, and it has considered these comments in finalizing this rule. Many industry commenters reported that they expend substantial resources on HMDA compliance that they could instead use for other purposes or that they have structured their lines of business to ensure they are not required to report under HMDA. Some cited, for example, the burden of establishing procedures, purchasing reporting software, and training staff to comply with HMDA, and noted that compliance can be particularly difficult for smaller institutions with limited staff. A trade association commented that the Bureau's estimates do not account for the reduction in examination burdens and the resources diverted to HMDA compliance from other more productive activities. It also asserted that the Bureau's burden analysis did not properly address data security costs associated with HMDA collection and reporting. Another trade association suggested that the three-tiered approach to estimating costs does not seem to account for the unique challenges of adapting business and multifamily lending to HMDA regulations and HMDA reporting infrastructure designed with single-family consumer mortgage lending in mind.

In their comments, consumer groups, civil rights groups, and other nonprofit organizations stated that Federal agency fair lending and CRA exams will become more burdensome for Federal agencies and the HMDA-exempt lenders since the agencies will now have to ask for internal data from the lenders instead of being able to use the HMDA data. They also noted that smaller-volume lenders already benefit from the EGRRCPA's partial exemptions and stated that almost all of the data that such institutions must report under HMDA would already need to be collected to comply with other statutes like the Truth in Lending Act, to sell loans to Fannie Mae or Freddie Mac, or to acquire Federal Housing Administration insurance for loans. A nonprofit organization that does HMDA-related research commented that it is hard to imagine that a bank would not keep an electronic record of its lending, even if it were not subject to HMDA reporting.

The Bureau has considered these comments and concludes, as it did in the 2019 HMDA Rule, that they do not undermine the Bureau's approach or cost parameters used in part VI of the May 2019 Proposal. For example, the activities that many industry commenters described as burdensome—including scrubbing data, training personnel, and preparing for HMDA-related examinations—are consistent with and captured by the 18 discrete compliance ''tasks'' that the Bureau identified through its study of the HMDA compliance process and costs in the 2015 HMDA rulemaking. As part of its analysis, the Bureau also recognized that costs vary by institution due to many factors, such as size, operational structure, and product complexity, and adopted a tiered framework to capture

2015 HMDA Rule that reflected the technology at the time of the study.

the relationships between operational complexity and compliance cost. While some products are more costly than others to report, the three-tiered framework uses representative institutions to capture this type of variability and estimate overall costs of HMDA reporting. In estimating compliance costs associated with HMDA reporting through this framework, the Bureau also recognized that much of the information required for HMDA reporting is information that financial institutions would need to collect, retain, and secure as part of their lending process, even if they were not subject to HMDA reporting. The Bureau therefore does not believe that the comments received provide a basis for departing from the approach for analyzing costs and benefits for covered persons used in part VI of the May 2019 Proposal.

The next step of the Bureau's consideration of the reduction of costs for covered persons involved aggregating the institution-level estimates of the cost reduction under each set of provisions up to the market-level. This aggregation required estimates of the total number of potentially impacted financial institutions and their total number of loan/application register records. The Bureau used a wide range of data in conducting this task, including recent HMDA data,[165] Call Reports, and Consumer Credit Panel data. These analyses were challenging, because no single data source provided complete coverage of all the financial institutions that could be impacted and because there is varying data quality among the different sources.

To perform the aggregation, the Bureau mapped the potentially impacted financial institutions to the three tiers described above. For each of the provisions analyzed, the Bureau assumed none of the changes would affect the high-complexity tier 1 reporters. The Bureau then assigned the potentially impacted financial institutions to either tier 2 or tier 3. In doing so, the Bureau relied on two constraints: (1) The estimated number of impacted institutions in tiers 2 and 3, combined, must equal the estimated number of impacted institutions for the applicable provision, and (2) the number of loan/application register records submitted annually by the impacted financial institutions in tiers 2 and 3, combined, must equal the estimated number of loan/application register records for the applicable provision. As in the 2015 HMDA Rule, the Bureau assumed for closed-end reporting that a representative low-complexity tier 3 financial institution has 50 closed-end mortgage loan HMDA loan/application register records per year and a representative moderate-complexity tier 2 financial institution has 1,000 closed-end mortgage loan HMDA loan/application register records per year. Similarly, the Bureau assumed for open-end reporting that a representative low-complexity tier 3 financial institution has 150 open-end HMDA loan/application register records per year and a representative moderate-complexity tier 2 financial institution has 1,000 open-end HMDA loan/application register records per year. Constraining the total number of impacted institutions and the number of impacted loan/application register records across tier 2 and tier 3 to the aggregate estimates thus enables the Bureau to calculate the approximate numbers of impacted institutions in tiers 2 and 3 for each set of provisions.[166]

Multiplying the impact estimates for representative financial institutions in each tier by the estimated number of impacted institutions, the Bureau arrived at the market-level estimates.

2. Costs to Covered Persons

In general, and as discussed in part VII.D.1 above, both sets of provisions in this final rule will reduce the ongoing operational costs associated with HMDA reporting for the affected covered persons. In the interim, it is possible that to adapt to the rule, covered persons may incur certain one-time costs. Such one-time costs are mostly related to training and system changes in covered persons' HMDA reporting/loan origination systems. Based on the Bureau's outreach to industry, however, the Bureau believes that such one-time costs are fairly small. Commenters did not indicate that covered persons who would be excluded completely from reporting HMDA data would incur significant costs, either for closed-end mortgage loans or for open-end lines of credit, or both.

3. Benefits to Consumers

Having generated estimates of the changes in ongoing costs and one-time costs to covered financial institutions, the Bureau then can attempt to estimate the potential pass-through of such cost reduction from these institutions to consumers, which could benefit consumers and affect credit access. According to economic theory, in a perfectly competitive market where financial institutions are profit maximizers, the affected financial institutions would pass on to consumers the marginal, *i.e.,* variable, cost savings per application or origination, and absorb the one-time and increased fixed costs of complying with the rule. The Bureau estimated in the 2015 HMDA Rule the impacts on the variable costs of the representative financial institutions in each tier due to various provisions of that rule. Similarly, the estimates of the pass-through effect from covered persons to consumers due to the provisions under this rule are based on the relevant estimates of the changes to the variable costs in the 2015 HMDA Rule with some updates. The Bureau notes that the market structure in the consumer mortgage lending markets may differ from that of a perfectly competitive market (for instance due to information asymmetry between lenders and borrowers) in which case the pass-through to the consumers would most likely be smaller than the pass-through under the perfect competition assumption.[167]

In the May 2019 Proposal, the Bureau requested additional comments on the potential pass-through from financial institutions to consumers due to the reduction in reporting costs. A trade association commented that it believed that the proposed higher thresholds will move mortgage markets to more perfect competition. It suggested that institutions that currently manage their origination volumes to stay below HMDA reporting thresholds will be incentivized to increase operations and that, by being able to offer savings on fees and pricing, and by being more competitive due to lower productions costs, smaller banks will be able to enter the mortgage market at more profitable levels. However, as the Bureau noted in the 2019 HMDA Rule, this comment did

[165] The majority of the analyses in part VI of the May 2019 Proposal were conducted prior to the official submission deadline of the 2018 HMDA data on March 1, 2019, and 2017 was the most recent year of HMDA data the Bureau used for the analyses presented in the May 2019 Proposal. For this part of the final rule, the Bureau has supplemented the analyses with the 2018 HMDA data. The majority of the analyses for this final rule were conducted prior to the official submission deadline of the 2019 HMDA data on March 2, 2020. As of the date of issuance of this final rule, the Bureau is processing the 2019 HMDA loan/application register submissions and checking data quality, and some financial institutions are continuing to revise and resubmit their 2019 HMDA data. Accordingly, the Bureau has not considered the 2019 HMDA data in the analyses for this final rule. The Bureau notes the market may fluctuate from year to year, and the Bureau's rulemaking is not geared towards such transitory changes on an annual basis but is instead based on larger trends.

[166] *See supra* note 85.

[167] The further the market moves away from a perfectly competitive market, the smaller the pass-through would be.

not provide specific estimates that the Bureau can utilize in refining the analyses.

4. Cost to Consumers

HMDA is a sunshine statute. The purposes of HMDA are to provide the public with loan data that can be used: (i) To help determine whether financial institutions are serving the housing needs of their communities; (ii) to assist public officials in distributing public-sector investment so as to attract private investment to areas where it is needed; and (iii) to assist in identifying possible discriminatory lending patterns and enforcing antidiscrimination statutes.[168] The provisions in this final rule, as adopted, lessen the reporting requirements for excluded financial institutions by relieving them of the obligation to report all data points related to either closed-end mortgage loans or open-end lines of credit. As a sunshine statute regarding data reporting and disclosure, most of the benefits of HMDA are realized indirectly. With less data required to be collected and reported under HMDA, the HMDA data available to serve HMDA's statutory purposes will decline.[169] However, to quantify the reduction of such benefits to consumers presents substantial challenges. The Bureau sought comment on the magnitude of the loss of HMDA benefits from these changes to the available data and/or methodologies for measuring these effects in the May 2019 Proposal.

The Bureau received a number of comments emphasizing the loss of HMDA benefits from decreased information lenders would report under HMDA were the May 2019 Proposal to be finalized. For example, a group of 148 local and national organizations stated that raising reporting thresholds will lead to another round of abusive and discriminatory lending similar to abuses that occurred in the years before the financial crisis. These commenters also stated that the general public, researchers, and Federal agencies will have an incomplete picture of lending trends in thousands of census tracts and neighborhoods if affected institutions no longer report HMDA data. Additionally, a State attorney general stated that the May 2019 Proposal failed to fully account for the harms that would be imposed by the proposal, including the costs to States in losing access to helpful data. However, as the Bureau noted in the 2019 HMDA Rule, none of these commenters provided specific quantifiable estimates of the loss of benefits from decreased information lenders would report under HMDA.

The Bureau acknowledges that quantifying and monetizing benefits of HMDA to consumers would require identifying all possible uses of HMDA data, establishing causal links to the resulting public benefits, and then quantifying the magnitude of these benefits. For instance, quantification would require measuring the impact of increased transparency on financial institution behavior, the need for public and private investment, the housing needs of communities, the number of financial institutions potentially engaging in discriminatory or predatory behavior, and the number of consumers currently being unfairly disadvantaged and the level of quantifiable damage from such disadvantage. Similarly, for the impact analyses of this final rule, the Bureau is unable to readily quantify the loss of some of the HMDA benefits to consumers with precision, both because the Bureau does not have the data to quantify all HMDA benefits and because the Bureau is not able to assess completely how this final rule will reduce those benefits.

In light of these data limitations, the discussion below generally provides a qualitative (not quantitative) consideration of the costs, *i.e.,* the potential loss of HMDA benefits to consumers from the rule.

E. Potential Benefits and Costs to Consumers and Covered Persons

1. Overall Summary

In this section, the Bureau presents a concise, high-level table summarizing the benefits and costs considered in the remainder of the discussion. This table is not intended to capture all details and nuances that are provided both in the rest of the analysis and in the section-by-section discussion above. Instead, it provides an overview of the major benefits and costs of the final rule, including the provisions to be analyzed, the baseline chosen for each set of provisions, the sub-provisions to be analyzed, the implementation dates of the sub-provisions, the annual savings on the operational costs of covered persons due to the sub-provisions, the impact on the one-time costs of covered persons due to the sub-provision, and generally how the provisions in the final rule affect HMDA's benefits.

TABLE 2—OVERVIEW OF MAJOR POTENTIAL BENEFITS AND COSTS OF THE FINAL RULE

Provisions to be analyzed	Baseline	Baseline threshold	New threshold	Implementation date	Savings on annual operational costs	Impact on one time costs	Loss of data coverage
Increasing Closed-end Mortgage Loan Coverage Threshold.	2015 and 2017 HMDA Rules, EGRRCPA, 2019 HMDA Rule.	25 originations in each of two preceding calendar years.	100 originations in each of two preceding calendar years.	Effective July 1, 2020.	$6.4 M	Negligible	Complete exclusion of reporting of approximately 1,700 reporters with about 112,000 closed-end mortgage loans.
Increasing Open-end Line of Credit Coverage Threshold.	2015 and 2017 HMDA Rules, EGRRCPA, 2019 HMDA Rule.	100 originations in each of two preceding calendar years.	200 originations in each of two preceding calendar years.	Effective January 1, 2022.	$3.7 M	Savings of $23.9 M	Complete exclusion of reporting of approximately 400 reporters with about 69,000 open-end line of credit originations.

[168] 12 CFR 1003.1(b).

[169] The changes in this final rule will reduce public information regarding whether financial institutions are serving the needs of their communities. To the extent that these data are used for other purposes, the loss of data could result in other costs.

2. Provisions to Increase the Closed-End Threshold

Scope of the Provisions

The final rule increases the thresholds for reporting data about closed-end mortgage loans so that financial institutions originating fewer than 100 closed-end mortgage loans in either of the two preceding calendar years are excluded from HMDA's requirements for closed-end mortgage loans effective July 1, 2020.

The 2015 HMDA Rule requires institutions that originated at least 25 closed-end mortgage loans in each of the two preceding calendar years and meet all other reporting criteria to report their closed-end mortgage applications and loans. The EGRRCPA provides a partial exemption for insured depository institutions and insured credit unions that originated fewer than 500 closed-end mortgage loans in each of the two preceding years and do not have certain less than satisfactory CRA examination ratings. This section considers the provisions in the final rule that increase the closed-end loan threshold to 100 so that only financial institutions that originated at least 100 closed-end mortgage loans in each of the two preceding years must report data on their closed-end mortgage applications and loans under HMDA.

Using data from various sources, including past HMDA submissions, Call Reports, Credit Union Call Reports, Summary of Deposits, and the National Information Center, the Bureau applied all current HMDA reporting requirements, including Regulation C's existing complete regulatory exclusion for institutions that originated fewer than 25 closed-end mortgage loans in either of the two preceding calendar years, and estimates that currently there are about 4,860 financial institutions required to report their closed-end mortgage loans and applications under HMDA. Together, these financial institutions originated about 6.3 million closed-end mortgage loans in calendar year 2018. The Bureau observes that the total number of institutions that were engaged in closed-end mortgage lending in 2018, regardless of whether they met all HMDA reporting criteria, was about 11,600, and the total number of closed-end mortgage originations in 2018 was about 7.2 million. In other words, under the current 25 closed-end loan threshold, about 41.9 percent of all mortgage lenders are required to report HMDA data, and they account for about 87.8 percent of all closed-end mortgage originations in the country. The Bureau estimates that among those 4,860 financial institutions that are currently required to report closed-end mortgage loans under HMDA, about 3,250 insured depository institutions and insured credit unions are partially exempt for closed-end mortgage loans under the EGRRCPA, and thus are not required to report a subset of the data points currently required by Regulation C for these transactions.

The Bureau stated in the May 2019 Proposal that it intended to review the 2018 HMDA data more closely in connection with this rulemaking once the 2018 submissions were more complete. The Bureau released the national loan level dataset for 2018 and the Bureau's annual overview of residential mortgage lending based on HMDA data [170] (collectively the 2018 HMDA Data) in August 2019, and reopened the comment period on aspects of the May 2019 Proposal until October 15, 2019, to give commenters an opportunity to comment on the 2018 HMDA Data. The estimates reflected in this final rule are based on the HMDA data collected in 2017 and 2018 as well as other sources. The Bureau notes that the estimates provided above update the initial estimates provided in the May 2019 Proposal with the 2018 HMDA data.[171] In particular, as the 2018 HMDA data analyses were not available at the time when the Bureau developed the May 2019 Proposal, the Bureau used HMDA data from 2016 and 2017 with a two-year look-back period in calendar years 2016 and 2017 for its estimates of potential reporters and projected the lending activities of financial institutions using their 2017 activities as proxies. In generating the updated estimates for this final rule, the Bureau has used HMDA data from 2017 and 2018 with a two-year look-back period in calendar years 2017 and 2018 for its estimates of potential reporters and projected the lending activities of financial institutions using their 2018 activities as proxies. In addition, for the estimates provided in the May 2019 Proposal and in this final rule, the Bureau restricted the projected reporters to only those that actually reported data in the most recently available year of HMDA data (2017 for the May 2019 proposal and 2018 for this final rule).[172]

The Bureau estimates that when the closed-end threshold increases to 100 under this final rule, the total number of financial institutions required to report closed-end mortgage loans will drop to about 3,160, a decrease of about 1,700 financial institutions compared to the current level. These 1,700 newly excluded institutions originated about 112,000 closed-end mortgage loans in 2018. The Bureau estimates that there will be about 6.2 million closed-end mortgage loan originations reported under the threshold of 100 closed-end mortgage loans, which will account for about 86.3 percent of all closed-end mortgage loan originations in the entire mortgage market. The Bureau further estimates that about 1,630 of the 1,700 newly excluded closed-end reporters that will be excluded under the threshold of 100 closed-end mortgage loans are eligible for a partial exemption for closed-end mortgage loans under the EGRRCPA.

The Bureau notes that the estimates presented above update the corresponding estimates from the May 2019 Proposal [173] for the reasons

[170] The Bureau's overview is available in two articles. Bureau of Consumer Fin. Prot., ''Data Point: 2018 Mortgage Market Activity and Trends: A First Look at the 2018 HMDA Data'' (Aug. 2019), *https://www.consumerfinance.gov/data-research/research-reports/data-point-2018-mortgage-market-activity-and-trends/;* Bureau of Consumer Fin. Prot., ''Introducing New and Revised Data Points in HMDA: Initial Observations from New and Revised Data Points in 2018 HMDA'' (Aug. 2019), *https://www.consumerfinance.gov/data-research/research-reports/introducing-new-revised-data-points-hmda/.*

[171] In the May 2019 Proposal, the Bureau estimated that there were about 4,960 financial institutions required to report their closed-end mortgage loans and applications under HMDA. Together, these financial institutions originated about 7.0 million closed-end mortgage loans in calendar year 2017. The Bureau observed that the total number of financial institutions that were engaged in closed-mortgage lending in 2017, regardless of whether they met all HMDA reporting criteria, was about 12,700, and the total number of closed-end mortgage originations in 2017 was about 8.2 million. The Bureau estimated then that under the current threshold of 25 closed-end mortgage loans, about 39 percent of all mortgage lenders were required to report HMDA data, and they accounted for about 85.6 percent of all closed-end mortgage originations in the country; among those 4,960 financial institutions that were required to report closed-end mortgage loans under HMDA, about 3,300 insured depository institutions and insured credit unions were partially exempt for closed-end mortgage loans under the EGRRCPA and the 2018 HMDA Rule.

[172] The Bureau recognizes that the estimates generated using this restriction may omit certain financial institutions that should have reported but did not report in the most recent HMDA reporting year. However, the Bureau applied this restriction to ensure that institutions included in its estimates are in fact financial institutions for purposes of Regulation C because it recognizes that institutions might not meet the Regulation C definition of financial institution for reasons that are not evident in the data sources that it reviewed.

[173] In the May 2019 Proposal, the Bureau estimated that if the closed-end threshold were increased to 100, the total number of financial institutions that would be required to report closed-end mortgage loans would drop to about 3,240, a decrease of about 1,720 financial institutions compared to the current level. These 1,720 newly excluded institutions originated about 147,000 closed-end mortgage loans in 2017. There would be about 6.87 million closed-end mortgage loan originations reported under the threshold of 100 closed-end mortgage loans, which would account

Continued

explained above, reflecting more recent data. The updated estimates overall are consistent with the Bureau's analysis in the May 2019 Proposal and continue to support the Bureau's view regarding the impacts of a threshold of 100 closed-end mortgage loans.

Table 3 below shows the Bureau's estimates of the number of closed-end reporters that would be required to report under various potential thresholds, and the number of closed-end originations reported by these financial institutions, both in total and broken down by whether they are depository institutions or non-depository institutions, and among depository institutions whether they are partially exempt under the EGRRCPA.[174]

TABLE 3—ESTIMATED NUMBER OF CLOSED-END REPORTERS AND CLOSED-END MORTGAGE LOANS REPORTED UNDER VARIOUS THRESHOLDS

Threshold	Non-depository institution	Depository institution		Total
		Not partially exempt	Partially exempt	
25:				
# of Reporters	740	870	3,250	4,860
# of Reported Loans (in thousands)	3,429	2,419	475	6,323
50				
# of Reporters	720	870	2,530	4,120
# of Reported Loans (in thousands)	3,428	2,419	443	6,290
100				
# of Reporters	680	860	1,620	3,160
# of Reported Loans (in thousands)	3,425	2,417	369	6,211

Benefits to Covered Persons

The final rule's complete exclusion from closed-end mortgage reporting for institutions that originated fewer than 100 closed-end mortgage loans in either of the two preceding calendar years conveys a direct benefit to the excluded covered persons by reducing the ongoing costs of having to report closed-end mortgage loans and applications that were previously required.

In the impact analysis of the 2015 HMDA Rule, prior to the adoption of the changes in the 2015 HMDA Rule and implementation of the Bureau's operational improvements, the Bureau estimated that the annual operational costs for financial institutions of reporting under HMDA were approximately $2,500 for a representative low-complexity tier 3 financial institution with a loan/application register size of 50 records; $35,600 for a representative moderate-complexity tier 2 financial institution with a loan/application register size of 1,000 records; and $313,000 for a representative high-complexity tier 1 financial institution with a loan/application register size of 50,000 records. The Bureau estimated that accounting for the operational improvements, the net impact of the 2015 HMDA Rule on ongoing operational costs for closed-end reporters would be approximately $1,900, $7,800, and $20,000[175] per year, for representative low-, moderate-, and high-complexity financial institutions, respectively. This means that with all components of the 2015 HMDA Rule implemented and accounting for the Bureau's operational improvements, the estimated annual operational costs for closed-end mortgage reporting would be approximately $4,400 for a representative low-complexity tier 3 reporter, $43,400 for a representative moderate-complexity tier 2 reporter, and $333,000 for a representative high-complexity tier 1 reporter.

For purposes of this final rule, updating the above numbers to account for inflation, the Bureau estimates that if a financial institution is required to report under the 2015 HMDA Rule and is not partially exempt under the EGRRCPA, the savings on the annual operational costs from not reporting any closed-end mortgage data under the final rule is as follows: approximately $4,500 for a representative low-complexity tier 3 institution, $44,700 for a representative moderate-complexity tier 2 institution, and $343,000 for a representative high-complexity tier 1 institution. On the other hand, the Bureau estimates that if a financial institution is eligible for a partial exemption on its closed-end mortgage loans under the EGRRCPA, the annual savings in the ongoing costs from the partial exemption alone would be approximately $2,300 for a representative low-complexity tier 3 institution, $11,900 for a representative moderate-complexity tier 2 institution and $33,900 for a representative high-complexity tier 1 institution. Therefore, the Bureau estimates that if a financial institution is required to report under the 2015 HMDA Rule, but is partially exempt under the EGRRCPA, the savings in the annual operational costs from not reporting any closed-end mortgage data would be as follows: approximately $2,200 for a representative low-complexity tier 3 institution, $32,800 for a representative moderate-complexity tier 2 institution, and $309,000 for a representative high-complexity tier 1 institution. These estimates have already been adjusted for inflation.

In part VI of the May 2019 Proposal, the Bureau specifically requested information relating to the costs financial institutions incurred in collecting and reporting 2018 data in compliance with the 2015 HMDA Rule. The Bureau stated this information might be valuable in estimating costs in

for about 83.7 percent of all closed-end mortgage originations in the entire mortgage market.

The Bureau further estimated that all but about 50 of the 1,720 newly excluded closed-end mortgage loan reporters that would be excluded under the proposed threshold of 100 closed-end mortgage loans would be eligible for a partial exemption for closed-end mortgage loans as provided by the EGRRCPA and the 2018 HMDA Rule.

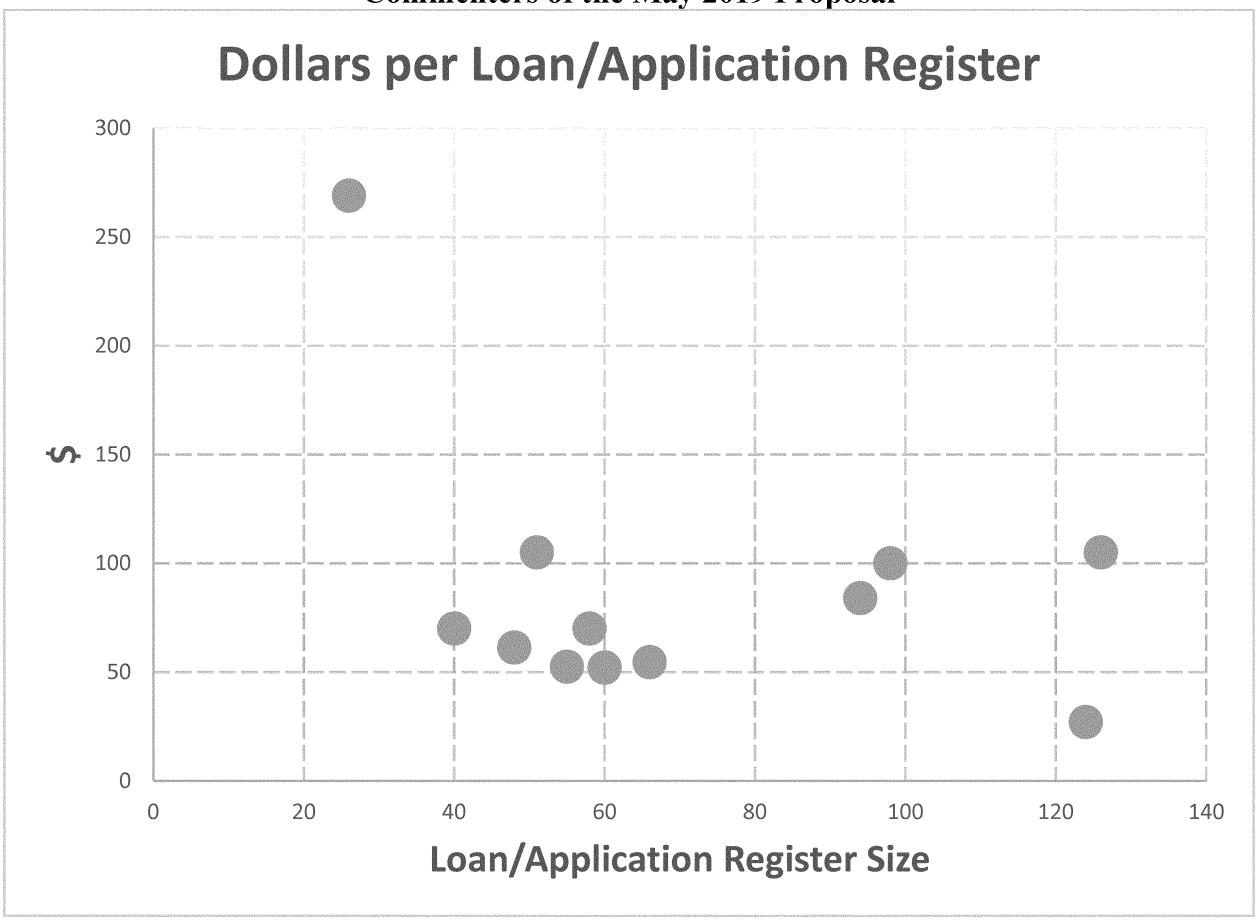
[174] In the May 2019 Proposal, the Bureau provided a similar table that included a breakdown of reporters by agency. For the final rule, as more relevant here, the Bureau has instead used this table to summarize the Bureau's estimates broken down by whether the reporters are depository institutions or non-depository institutions and, among depository institutions, whether they are partially exempt under the EGRRCPA.

[175] This does not include the costs of quarterly reporting for financial institutions that have annual origination volume greater than 60,000. Those quarterly reporters are all high-complexity tier 1 institutions, and the Bureau estimates none of the quarterly reporters will be excluded under this final rule.

the Dodd-Frank Act section 1022(b) analysis issued with the final rule. The Bureau received a number of comments regarding the costs of collecting and reporting data in compliance with the 2015 HMDA Rule. Among the comments that provided specific cost estimates of compliance, most are related to closed-end reporting. The degree of details of such comments vary. Some provided the estimates of HMDA operational costs in dollar terms, some provided estimates of hours employees spent on each loan/application register record on average, some provided the cost of purchasing software, some provided consulting and auditing costs, and some provided the number of loan/application register records they processed while others did not.

The Bureau has reviewed these cost estimates provided in comments and compared them with the Bureau's estimates of HMDA operational costs using the three representative tier approach. Most of these commenters had low loan/application register volume similar to the representative tier 3 financial institutions. For example, one small financial institution commented that it was spending approximately $12,000 in employee expenses alone to generate its loan/application register or approximately $68 to $100 per loan/application register record. Based on the information provided by this commenter, the Bureau estimates the annual loan/application register size for this commenter is between 175 and 200 records, which is close to the Bureau's assumption for a representative low-complexity tier 3 financial institution in the estimates provided in the 2015 HMDA Rule. Specifically, the Bureau estimated that for a representative low-complexity tier 3 financial institution with 50 HMDA loan/application register records, the total ongoing costs with operational improvements the Bureau has implemented since issuing the 2015 HMDA Rule would be about $4,400, or about $88 per loan/application register record. Overall, the cost and hourly estimates provided by the commenters vary. Figure 1 plots the average costs per loan/application register record (on the vertical axis) against the number of loan/application register records (on vertical axis) for the low-complexity tier 3 financial institutions that provided cost estimates in their comments and that the Bureau was able to match to their 2018 HMDA loan/application register records. Other than a few outliers, they are all within the reasonable range that the Bureau anticipated and close to (though not exactly equal to) the Bureau's cost estimates for representative low-complexity tier 3 institutions. The Bureau notes that variation of operational costs among different financial institutions is not surprising. As the Bureau recognized in the 2015 HMDA Rule and the May 2019 Proposal, costs vary by institution due to many factors, such as size, operational structure, and product complexity, and that is the reason the Bureau adopted a tiered framework to capture the relationships between operational complexity and compliance cost. The three-tiered framework uses representative institutions to capture this type of variability and estimate overall costs of HMDA reporting.

Figure 1: Average Costs in Dollars per Loan/Application Register Reported by Commenters of the May 2019 Proposal



The Bureau has considered the comments it received on compliance costs and concludes that they do not undermine the Bureau's approach or cost parameters used in part VI of the May 2019 Proposal. The Bureau therefore does not believe that the comments received provide a basis for departing from the approach for analyzing costs for covered persons used in part VI of the May 2019 Proposal.

Using the methodology discussed above in part VI.D.1, the Bureau estimates that with the threshold of 100 closed-end mortgage loans under the final rule, about 1,700 institutions will be completely excluded from reporting closed-end mortgage data compared to the current level. About 1,630 of the 1,700 are eligible for the partial exemption for closed-end mortgage loans under the EGRRCPA. Approximately 1,640 of these newly-excluded institutions are depository institutions, and approximately 60 are nondepository institutions.

The Bureau estimates that, of the approximately 1,630 institutions that are (1) required to report closed-end mortgage loans under the 2015 HMDA Rule, (2) partially exempt under the EGRRCPA, and (3) completely excluded under the threshold of 100 closed-end mortgage loans, about 1,560 are similar to the representative low-complexity tier 3 institution and about 70 are similar to the representative moderate-complexity tier 2 institution. Of the approximately 70 remaining institutions that are required to report closed-end mortgage data under the 2015 HMDA Rule and are not partially exempt under the EGRRCPA but will be completely excluded under the threshold of 100 closed-end mortgage loans, about 60 are similar to the representative low-complexity tier 3 institution and about 10 are similar to the representative moderate-complexity tier 2 institution.[176]

Based on the estimates of the savings of annual ongoing costs for closed-end reporting per representative institution, grouped by whether or not it is partially exempt under the EGRRCPA, and the estimated tier distribution of these financial institutions that will be excluded under the 100 closed-end loan threshold, the Bureau estimates that the total savings in the annual ongoing costs from HMDA reporting by excluded firms that are already partially exempt for closed-end mortgage loans under the EGRRCPA will be about $5.9 million. The Bureau also estimates that the total savings in the annual ongoing costs from HMDA reporting by fully excluded firms that are not eligible for a partial exemption under the EGRRCPA will be about $0.5 million. Together the annual savings in the operational costs of firms newly excluded under the threshold of 100 closed-end loans will be about $6.4 million.[177]

Alternative Considered: 50 Closed-End Threshold

The threshold of 100 closed-end mortgage loans adopted in this final rule is one of the two alternative closed-end thresholds that the Bureau proposed in the May 2019 Proposal. The other alternative threshold proposed in the May 2019 Proposal was 50.

The Bureau estimates that if the closed-end threshold were increased to 50, the total number of financial institutions that would be required to report closed-end mortgage loans would drop to about 4,120, a decrease of about 740 financial institutions compared to the current level at 25. The 740 institutions that would be excluded originated about 33,000 closed-end mortgage loans in 2018. There would be about 6.29 million closed-end mortgage originations reported under the alternative threshold of 50 closed-end mortgage loans that the Bureau considered, which would account for about 87.4 percent of all closed-end mortgage loan originations in the entire mortgage market.

The Bureau further estimates that about 720 of the 740 closed-end mortgage reporters that would be excluded under the alternative threshold of 50 closed-end mortgage loans would be eligible for a partial exemption for closed-end mortgage loans under the EGRRCPA.

The Bureau estimates that, of the approximately 720 financial institutions that are (1) required to report closed-end mortgage loans under the 2015 HMDA Rule, (2) partially exempt under the EGRRCPA, and (3) completely excluded under the alternative threshold of 50 closed-end mortgage loans, about 710 are similar to the representative low-complexity tier 3 institution and about 10 are similar to the representative moderate-complexity tier 2 institution. Of the approximately 20 remaining financial institutions that are required to report closed-end mortgage loans under the 2015 HMDA Rule and are not partially exempt under the EGRRCPA but would be completely excluded under the alternative threshold of 50 closed-end mortgage loans, all are similar to the representative low-complexity tier 3 institution.

As described above, the Bureau first estimates the savings of annual ongoing costs for closed-end reporting per representative institution, grouped by whether or not it is partially exempt for closed-end reporting under the EGRRCPA, and the tier distribution of these institutions that would be excluded under the alternative threshold of 50 closed-end mortgage loans. Using that information, the Bureau then estimates that, under the alternative threshold of 50 closed-end mortgage loans, the total savings in annual ongoing costs from HMDA reporting by fully excluded institutions that are already partially exempt under the EGRRCPA would be about $1.9 million, and the total savings in the annual ongoing costs from HMDA reporting by fully excluded firms that are not eligible for a partial exemption under the EGRRCPA would be about $0.1 million. Together the annual savings in the operational costs of firms excluded under the alternative threshold of 50 closed-end mortgage loans would be about $2.0 million.

The Bureau notes the estimates provided above for the alternative threshold of 50 update the estimates for the proposed threshold of 50 in the May 2019 Proposal for the reasons explained above.[178]

[176] The Bureau estimated in the May 2019 Proposal that approximately 1,720 institutions would be newly excluded from the closed-end reporting under the proposed 100 loan threshold, of which about 1,670 are already partially exempt under EGRRCPA, and among those 1,670 financial institutions, about 1,540 are low-complexity tier 3 institutions and 130 are moderate-complexity tier 2 institutions. The Bureau also estimated in the May 2019 Proposal that of the approximately 50 remaining institutions that are required to report closed-end mortgage data under the 2015 HMDA Rule and are not partially exempt under the EGRRCPA but would be completely excluded under the threshold of 100 closed-end mortgage loans, about 45 are similar to the representative low-complexity tier 3 institution and about 5 are similar to the representative moderate-complexity tier 2 institution. These estimates are updated in the final rule and presented here.

[177] The Bureau estimated in the May 2019 Proposal that the total savings in the annual ongoing costs from HMDA reporting by excluded firms that are already partially exempt for closed-end mortgage loans under the EGRRCPA would be about $7.7 million. The Bureau also estimated that the total savings in the annual ongoing costs from HMDA reporting by fully excluded firms that are not eligible for a partial exemption under the EGRRCPA would be about $0.4 million. The Bureau estimated that together the annual savings in the operational costs of firms newly excluded under the threshold of 100 closed-end loans would be about $6.4 million. These estimates are updated in the final rule and presented here.

[178] In the May 2019 Proposal, the Bureau estimated that with the proposed threshold of 50 closed-end mortgage loans, about 760 institutions would be completely excluded from reporting closed-end mortgage data compared to the current level. All but about 20 of these 760 institutions would be eligible for a partial exemption under the EGRRCPA and the 2018 HMDA Rule. The Bureau

The Bureau further notes that, because the Bureau is finalizing the closed-end threshold at 100 instead of 50, the covered persons will realize additional annual savings in their operational costs of about $4.4 million.

Costs to Covered Persons

It is possible that, like any new regulation or revision to an existing regulation, financial institutions will incur certain one-time costs adapting to the changes to the regulation. Based on the Bureau's outreach to stakeholders, the Bureau understands that most of these one-time costs consists of interpreting and implementing the regulatory changes and not from purchasing software upgrades or turning off the existing reporting functionality that the newly excluded institutions already built or purchased prior to the new changes taking effect.

The Bureau sought comments on any costs to institutions that would be newly excluded under either of the alternative proposed increases to the closed-end threshold. No commenter expressed concern that the costs for newly excluded reporters would be substantial.

Benefits to Consumers

Having generated estimates of the reduction in ongoing costs on covered financial institutions due to the increase in the closed-end loan threshold, the Bureau then attempts to estimate the potential pass-through of such cost reduction from these institutions to consumers, which could benefit consumers and affect credit access. According to economic theory, in a perfectly competitive market where financial institutions are profit maximizers, the affected financial institutions would pass on to consumers the marginal, *i.e.,* variable, cost savings per application or origination, and absorb the one-time and increased fixed costs of complying with the rule.

The Bureau estimated in the 2015 HMDA Rule that the final rule would increase variable costs by $23 per closed-end mortgage application for representative low-complexity tier 3 institutions and $0.20 per closed-end mortgage application for representative moderate-complexity tier 2 institutions. The Bureau estimated that prior to the 2015 HMDA Rule, the variable costs of HMDA reporting were about $18 per closed-end mortgage application for representative low-complexity tier 3 institutions and $6 per closed-end mortgage application for representative moderate-complexity tier 2 institutions. For purposes of this final rule, adjusting the above numbers for inflation, the Bureau estimates the savings on the variable cost per closed-end application for a representative low-complexity tier 3 financial institution that is not partially exempt under the EGRRCPA but excluded from closed-end reporting under this final rule will be about $42 per application; the savings on the variable cost per application for a representative moderate-complexity tier 2 financial institution that is not partially exempt under the EGRRCPA but excluded from closed-end reporting under the final rule will be about $6.40 per application.

The Bureau estimates that the partial exemption for closed-end mortgage loans under the EGRRCPA for eligible insured depository institutions and insured credit unions reduces the variable costs of HMDA reporting by approximately $24 per closed-end mortgage application for representative low-complexity tier 3 institutions, $0.68 per closed-end mortgage application for representative moderate-complexity tier 2 institutions, and $0.05 per closed-end mortgage application for representative high-complexity tier 1 institutions. The savings on the variable cost per application for a representative low-complexity tier 3 financial institution that is partially exempt under the EGRRCPA and also fully excluded from closed-end reporting under the final rule will be about $18.30 per application. The savings on the variable cost per application for a representative moderate-complexity tier 2 financial institution that is partially exempt under the EGRRCPA and fully excluded from closed-end reporting under the final rule will be about $5.70 per application. These are the cost reductions that excluded institutions under the final rule might pass through to consumers, assuming the market is perfectly competitive. This potential reduction in the expense consumers face when applying for a mortgage will be amortized over the life of the loan and may represent a very small amount relative to the cost of a mortgage loan. As a point of reference, the median total loan costs for closed-end mortgages was $6,056 according to the 2018 HMDA Data.[179] The Bureau notes that the market structure in the consumer mortgage lending market may differ from that of a perfectly competitive market (for instance due to information asymmetry between lenders and borrowers) in which case the pass-through to the consumers would most likely be smaller than the pass-through under the perfect competition assumption.[180]

Costs to Consumers

The increase in the closed-end threshold to 100 loans will relieve excluded financial institutions from the reporting requirements for all closed-end mortgage loans and applications. As a result, HMDA data on these institutions' closed-end mortgage loans and applications will no longer be available to regulators, public officials, and members of the public. The decreased data about excluded institutions may lead to adverse outcomes for some consumers. For instance, HMDA data, if reported, could help regulators and public officials better understand the type of funds that are flowing from lenders to consumers and consumers' needs for mortgage credit. The data may also help improve the processes used to identify possible discriminatory lending patterns and enforce antidiscrimination statutes. A State attorney general commenter expressed concern that the May 2019 Proposal did not fully account for these costs, including the costs to States in losing access to helpful data, while a consumer organization commenter stated that the public would face an increased burden in understanding and accurately mapping the flow of credit. The Bureau did not, however, receive any comments that quantify the losses.

The Bureau recognizes that the costs to consumers from increasing the

estimated then that, of the approximately 740 financial institutions that are (1) required to report closed-end mortgages under the 2015 HMDA Rule, (2) partially exempt under the EGRRCPA, and (3) completely excluded under the proposed 50 loan threshold, about 727 were similar to the representative low-complexity tier 3 institution and about 13 were similar to the representative moderate-complexity tier 2 institution. Of the approximately 20 remaining financial institutions that are required to report closed-end mortgages under the 2015 HMDA Rule and are not partially exempt under the EGRRCPA but would be completely excluded under the proposed threshold of 50 closed-end mortgage loans, about 19 were similar to the representative low-complexity tier 3 institution and only one was similar to the representative moderate-complexity tier 2 institution. The Bureau estimated that the total savings in annual ongoing costs from HMDA reporting by fully excluded institutions that are already partially exempt under the EGRRCPA would be about $2 million, and the total savings in the annual ongoing costs from HMDA reporting by fully excluded firms that previously were not eligible for a partial exemption under the EGRRCPA would be about $140,000. Together the annual savings in the operational costs of firms excluded under the proposed threshold of 50 closed-end mortgage loans would be about $2.2 million.

[179] *See* Bureau of Consumer Fin. Prot., ''Introducing New and Revised Data Points in HMDA: Initial Observations from New and Revised Data Points in 2018 HMDA'' (Aug. 2019), *https://www.consumerfinance.gov/data-research/research-reports/introducing-new-revised-data-points-hmda/.*

[180] The further the market moves away from a perfectly competitive market, the smaller the pass-through would be.

threshold to 100 loans will be higher than it would be if the Bureau were to increase the threshold to 50 loans. The Bureau currently lacks sufficient data to quantify these costs other than the estimated numbers of covered loans and covered institutions under the two alternative proposed thresholds, as discussed above and reported in Table 3.

3. Provisions to Increase the Open-End Threshold

Scope of the Provisions

The final rule will permanently set the threshold for reporting data about open-end lines of credit at 200 open-end lines of credit in each of the two preceding calendar years starting in 2022.

The 2015 HMDA Rule generally requires financial institutions that originated at least 100 open-end lines of credit in each of the two preceding years to report data about their open-end lines of credit and applications. The 2017 HMDA Rule temporarily increased the open-end threshold to 500 open-end lines of credit for two years, and the 2019 HMDA Rule extended the temporary threshold for two additional years. Thus, only financial institutions that originated at least 500 open-end lines of credit in each of the two preceding years are subject to HMDA's requirements for their open-end lines of credit for 2018 through 2021. The EGRRCPA generally provides a partial exemption for insured depository institutions and insured credit unions that originated fewer than 500 open-end lines of credit in each of the two preceding years and do not have certain less than satisfactory CRA examination ratings. However, for 2018 through 2021, all insured depository institutions and insured credit unions that are eligible for a partial exemption for open-end lines of credit by the EGRRCPA are also fully excluded from HMDA's requirements for their open-end lines of credit. Absent this final rule, starting in 2022 the open-end threshold would have reverted to 100, and eligible institutions that exceeded the threshold of 100 open-end lines of credit would have been able to use the EGRRCPA's open-end partial exemption if they originated fewer than 500 open-end lines of credit in each of the two preceding years. Thus, the appropriate baseline for the consideration of benefits and costs of the change to the open-end threshold is a situation in which the open-end threshold is set at 100 for each of two preceding years for data collection starting in 2022, with a partial exemption threshold of 500 open-end lines of credit.

The Bureau has used multiple data sources, including credit union Call Reports, Call Reports for banks and thrifts, HMDA data, and Consumer Credit Panel data, to develop estimates about open-end originations for lenders that offer open-end lines of credit and to assess the impact of various thresholds on the number of reporters and on market coverage under various scenarios.[181]

In part VI of the May 2019 Proposal, the Bureau estimated that if the threshold were set at 100 open-end lines of credit, the number of reporters would be about 1,014, who in total originated about 1.41 million open-end lines of credit, representing about 88.7 percent of all originations and 15.3 percent of all lenders in the market. In comparison, if the threshold were set at 200 open-end lines of credit, the Bureau estimated that the number of reporters would be about 613, who in total originated about 1.34 million open-end lines of credit. In terms of market coverage, this would represent about 84.2 percent of all originations and 9.2 percent of all lenders in the open-end line of credit market. In other words, if the threshold were increased to 200, in comparison to the default baseline where the threshold was set at 100 in 2022, the Bureau estimated that the number of institutions affected would be about 401, who in total originated about 69,000 open-end lines of credit. Among those 401 institutions, the Bureau estimated that about 378 already qualify for a partial exemption for their open-end lines of credit under the EGRRCPA and in total they originate about 61,000 open-end lines of credit.

As the 2018 HMDA data analyses were not available at the time of the May 2019 Proposal, 2017 was the most recent year of HMDA data the Bureau used for the analyses in the May 2019 Proposal. For this part of the final rule, the Bureau has supplemented the analyses with the 2018 HMDA data now available. In the 2018 HMDA data, which used an open-end reporting threshold of 500, about 957 reporters actually reported any open-end line of credit transactions. In total, these institutions reported about 1.15 million open-end originations, which is close to what the Bureau projected in its estimate of 1.23 million originations to be reported in the May 2019 Proposal. Even though the number of open-end reporters in the 2018 HMDA data (957) is greater than the number the Bureau forecasted would be required to report (333) in the May 2019 Proposal, only 307 of the institutions that reported open-end transactions in the 2018 HMDA data actually reported greater than 500 open-end originations, which is close to the Bureau's projection that there would be 333 required open-end reporters with a reporting threshold of 500. The Bureau's projection in the May 2019 Proposal for the temporary threshold of 500 open-end originations was based on the projected number of open-end reporters whose open-end origination volumes were greater than 500 in each of the preceding two years (which is how the HMDA reporting requirements are structured), and not on the volume from the current HMDA activity year. In addition, that projection cannot account for the number of reporters who would report voluntarily even though they are not required to do so. Given these factors, it is possible that some lenders with open-end line of credit origination volumes exceeding 500 in both 2016 and 2017 originated fewer than 500 open-end lines of credit in 2018, but were nevertheless required to report their 2018 data under the HMDA reporting requirements. On the other hand, it is also possible that some reporters opted to report their open-end lending activities in the 2018 HMDA data even though they were not required to report. Regardless, these 2018 open-end reporters with a reported origination volume of fewer than 500 open-end lines of credit in 2018 are not required to collect data on their open-end activity in 2020 after the two-year temporary extension of the 500 open-end threshold of the 2019 HMDA Rule took effect, based on the two-year look-back period for the reporting requirements. Therefore, the Bureau believes that its estimates of the number of impacted institutions provided in the May 2019 Proposal were and are reasonable and consistent with the actual number of open-end reporters in the 2018 HMDA data.

[181] In general, credit union Call Reports provide the number of originations of open-end lines of credit secured by real estate but exclude lines of credit in the first-lien status. Call Reports for banks and thrifts report only the balance of the home-equity lines of credit at the end of the reporting period but not the number of originations in the period.

Moreover, there are two additional considerations that support the Bureau's continued reliance in this final rule on its estimates on open-end coverage under various thresholds developed in the May 2019 Proposal. First, the permanent threshold of 200 open-end lines of credit starting in 2022 adopted in this final rule is lower than the temporary threshold of 500 open-end lines of credit that was in effect for the 2018 HMDA data. Hence, most institutions that originated fewer than 500 open-end lines of credit but at least 200 open-end lines of credit likely were not captured by the 2018 HMDA data, but they would have been required to report if the threshold had been set at 200. Second, the HMDA reporting requirements consider a two-year look-back period, and only 2018 HMDA data analyses were available as of the time of this final rule's development. For these reasons, the Bureau believes that its estimates of open-end coverage under various thresholds developed for the May 2019 Proposal continue to provide the most reliable estimates for this final rule.

On the other hand, because the number of open-end *applications* was not available in any data sources prior to the 2018 HMDA data, in past HMDA rulemakings related to open-end reporting, the Bureau relied on the projected number of *originations* as a proxy for the number of loan/application register records for the analyses. With the 2018 HMDA data reported, the Bureau now can evaluate the impact of the final rule using the projected loan/application register records instead of projected originations for the first time. Because most of the data points under HMDA are required for all loan/application register records, not just originated loans, the Bureau has updated the estimates of cost and cost savings for open-end lines of credit based on the number of loan/application register records instead of originations. The Bureau's coverage estimates, however, continue to be based on originations because the thresholds are based on origination volume, and thus, as noted immediately above, the estimates previously provided continue to be reasonable. The analyses below have been supplemented to reflect the new 2018 HMDA data that includes applications, originations, and purchased loans. Table 4 below shows the estimated number of reporters of open-end lines of credit, their estimated origination volume, and the market share under thresholds of 100, 200 and 500 open-end lines of credit.[182] The Bureau notes that the threshold of 100 open-end lines of credit is the baseline of the analyses adopted for purposes of this final rule, the threshold of 200 open-end lines of credit is the threshold adopted under the final rule, and the threshold of 500 open-end lines of credit is the temporary threshold in place for 2020 and 2021 under the 2019 HMDA Rule.

TABLE 4—ESTIMATED NUMBER OF OPEN-END REPORTERS AND OPEN-END LINES OF CREDIT REPORTED UNDER VARIOUS THRESHOLDS

Open-end Lines of Credit	Universe	Reporting Threshold		
		100	200	500
# of Loans (in 1000's):				
All	1,590	1,410	1,341	1,233
Market Coverage		88.7%	84.4%	77.6%
Type:				
Banks & Thrifts	880	814	787	753
Credit Unions	653	545	506	437
Non-DIs	57	51	48	44
# of Institutions:				
All	6,615	1,014	613	333
Type:				
Banks & Thrifts	3,819	391	212	113
Credit Unions	2,578	581	376	205
Non-DIs	218	42	25	15

Benefits to Covered Persons

The increase in the permanent threshold from 100 to 200 open-end lines of credit in each of the two preceding calendar years starting in 2022, conveys a direct benefit to covered persons that originated fewer than 200 open-end lines of credit in either of the two preceding years but originated at least 100 open-end lines of credit in each of the two preceding years in reducing the ongoing costs of having to report their open-end lines of credit. The Bureau estimates that increasing the permanent threshold to 200 open-end lines of credit will relieve approximately 384 depository institutions and approximately 17 non-depository institutions from reporting open-end lines of credit as compared to having the threshold decrease to 100.

The Bureau estimates that, with the threshold increased to 200 as compared to decreasing to 100 starting in 2022, about 401 financial institutions will be excluded from reporting open-end lines of credit starting in 2022. About 378 of those 401 financial institutions are eligible for the partial exemption for open-end lines of credit under the EGRRCPA, and about 23 of them are not eligible for the partial exemption for open-end lines of credit because in one of the preceding two years their open-end origination volume exceeded 500. Of the 378 institutions that are already partially exempt under the EGRRCPA but will be fully excluded from open-end reporting starting in 2022 under this final rule, the Bureau estimates that about 301 are low-complexity tier 3 open-end reporters, about 77 are moderate-complexity tier 2 open-end reporters, and none are high-complexity tier 1 reporters. In addition, of the 23 institutions that are not eligible for the partial exemption under the EGRRCPA but will be fully excluded from open-

[182] In the May 2019 Proposal, the Bureau provided a similar table that included a breakdown of open-end reporters by agency. For the final rule, as more relevant here, the Bureau has instead included the breakdown by depository institution versus non-depository institution.

end reporting starting in 2022 under this final rule, the Bureau estimates that about 8 are low-complexity tier 3 open-end reporters, about 15 are moderate-complexity tier 2 open-end reporters, and none are high-complexity tier 1 reporters.[183] Using the estimates of savings on ongoing costs for open-end lines of credit for representative financial institutions, grouped by whether the lender is already eligible for the partial exemption under the EGRRCPA, as described above, the Bureau estimates that by increasing the threshold to 200 open-end lines of credit starting in 2022, the excluded financial institutions that are already partially exempt under the EGRRCPA will receive an aggregate reduction in operational cost associated with open-end lines of credit of about $3.0 million per year starting in 2022, while the excluded financial institutions that are not already partially exempt under the EGRRCPA will receive an aggregate reduction in operational cost associated with open-end lines of credit of about $0.7 million per year starting in 2022. In total, increasing the threshold from 100 to 200 open-end lines of credit will result in savings in the operational costs associated with open-end lines of credit of about $3.7 million per year starting in 2022.[184] The increase in the threshold to 200 open-end lines of credit starting in calendar year 2022, as compared to having the threshold revert to 100, also conveys a direct benefit to covered persons that originated fewer than 200 open-end lines of credit in either of the two preceding years but originated at least 100 open-end lines of credit in each of the two preceding years in removing the one-time costs of having to report their open-end lines of credit, had the reporting threshold decreased to 100 according to the 2017 HMDA Rule.

It is the Bureau's understanding that most of the financial institutions that were temporarily excluded for 2018 through 2021 under the temporary threshold of 500 open-end lines of credit established in the 2017 HMDA Rule and 2019 HMDA Rule have not fully prepared for open-end reporting because they have been waiting for the Bureau to decide on the permanent open-end reporting threshold that will apply after the temporary threshold expires in 2022. Under the baseline in this impact analysis, absent this final rule, some of those financial institutions would have to start reporting their open-end lines of credit starting in 2022, and hence incur one-time costs to create processes and systems for open-end lines of credit. If the proposal to increase the open-end threshold to 200 starting in 2022 were not finalized, financial institutions that originated fewer than 200 open-end lines of credit in either of the two preceding years but originated at least 100 open-end lines of credit in each of the two preceding years would eventually have incurred one-time costs of having to report their open-end lines of credit, once the reporting threshold reverted to the permanent threshold of 100.

As noted in the 2015 HMDA Rule, the Bureau recognizes that many financial institutions, especially larger and more complex institutions, process applications for open-end lines of credit in their consumer lending departments using procedures, policies, and data systems separate from those used for closed-end loans. In the 2015 HMDA Rule, the Bureau assumed that the one-time costs for reporting information on open-end lines of credit required under the 2015 HMDA Rule would be roughly equal to 50 percent of the one-time costs of reporting information on closed-end mortgages. This translates to one-time costs of about $400,000 and $125,000 for open-end reporting for representative high- and moderate-complexity financial institutions, respectively, that will be required to report open-end lines of credit while also reporting closed-end mortgage loans. This assumption accounted for the fact that reporting open-end lines of credit will require some new systems, extra start-up training, and new compliance procedures and manuals, while recognizing that some fixed, one-time costs would need to be incurred anyway in making systemic changes to bring institutions into compliance with Regulation C and could be shared with closed-end lines of business. The assumption was consistent with the Bureau's estimate that an overwhelming majority of open-end reporters would also be reporting simultaneously closed-end mortgage loans and applications. In the 2015 HMDA Rule, the Bureau also assumed that the additional one-time costs of open-end reporting would be relatively low for low-complexity tier 3 financial institutions because they are less reliant on information technology systems for HMDA reporting and may process open-end lines of credit on the same system and in the same business unit as closed-end mortgage loans. Therefore, for low-complexity tier 3 financial institutions, the Bureau had assumed that the additional one-time cost created by open-end reporting is minimal and is derived mostly from new training and procedures adopted for the overall changes in the 2015 HMDA Rule.

In the proposal leading to the 2015 HMDA Rule, the Bureau asked for public comments and specific data regarding the one-time cost of reporting open-end lines of credit. Although some commenters on that proposal provided generic feedback on the additional burden of reporting data on these products, very few provided specific estimates of the potential one-time costs of reporting open-end lines of credit. After issuing the 2015 HMDA Rule, the Bureau heard anecdotal reports that one-time costs to begin reporting information on open-end lines of credit could be higher than the Bureau's estimates in the 2015 HMDA Rule. In the May 2019 Proposal, the Bureau indicated that it had reviewed the 2015 estimates and believed that the one-time cost estimates for open-end lines of credit provided in 2015, if applied to the proposed rule, would most likely be underestimates, for two reasons.

First, in developing the one-time cost estimates for open-end lines of credit in the 2015 HMDA Rule, the Bureau had envisioned that there would be cost sharing between the line of business that conducts open-end lending and the line of business that conducts closed-end lending at the corporate level, as the implementation of open-end reporting that became mandatory under the 2015 HMDA Rule would coincide with the implementation of the changes to closed-end reporting under the 2015 HMDA Rule. For instance, the resources of the corporate compliance department and information technology department could be shared and utilized simultaneously across different lines of

[183] The Bureau notes that more reporters are estimated to be in tier 2 in this updated analysis in the final rule than the number of reporters that the Bureau estimated to be in tier 2 in the May 2019 Proposal. This is mainly due to the fact that the Bureau now is able to supplement new information from the 2018 HMDA data, which allows the Bureau to conduct the estimates based on the number of open-end loan/application register records rather than the number of originations. Each institution is estimated to have more loan/application register records than in the May 2019 Proposal, because the Bureau is considering applications as well as originations, thus more institutions that were previously assigned to the tier 3 category are shifted into the tier 2 category.

[184] In the May 2019 Proposal, the Bureau estimated that the annual savings on operational costs would be about $1.8 million if the open-end threshold were increased from 100 to 200 in 2022. The higher estimate presented above for the final rule is mainly due to the fact that the Bureau now is able to supplement new information from the 2018 HMDA data, which allows the Bureau to conduct the estimates based on the number of open-end loan/application register records rather than the number of originations, resulting in more affected moderate-complexity tier 2 institutions and higher operational cost savings. Although the estimated total cost reduction is higher than it was in the proposal based on the additional 2018 HMDA data, the overall analysis is consistent with the Bureau's methodology and conclusions from the May 2019 Proposal.

business within the same lender in its efforts to set up processes and systems adapting to the 2015 HMDA Rule. Therefore, the Bureau assumed the one-time cost due to open-end reporting would be about one-half of the one-time costs due to closed-end reporting, in order to both reasonably count for the costs for reporting open-end lines of credit and avoid double counting. However, as the Bureau noted in the May 2019 Proposal, circumstances have somewhat changed since the 2015 HMDA Rule. The 2017 HMDA Rule temporarily increased the open-end lines of credit threshold from 100 to 500 for two years (2018 and 2019). The 2019 HMDA Rule further extended the temporary threshold of 500 open-end lines of credit for two additional years (2020 and 2021). Thus, there will be a considerable lag between the implementation of closed-end reporting changes under the 2015 HMDA Rule and the implementation of mandatory open-end reporting for those open-end lenders that have been temporarily excluded under the 2017 HMDA Rule and the 2019 HMDA Rule, but will be required to comply with HMDA's requirements for their open-end lines of credit starting in 2022 with the 200 origination threshold taking effect. As a result, the efficiency gain from one-time cost sharing between the closed-end and open-end reporting that was envisioned in the cost-benefit analysis of the 2015 HMDA Rule likely will not be applicable, if some of the temporarily excluded open-end reporters under the 2017 HMDA Rule and the 2019 HMDA Rule were to start preparing for open-end reporting several years after the implementation of closed-end changes.

Therefore, the Bureau now believes the one-time costs of starting to report information on open-end lines of credit, if the financial institution is to start reporting open-end lines of credit in 2022 and beyond, will be higher than the Bureau's initial estimates of one-time costs of open-end reporting provided in the 2015 HMDA Rule. Thus, for this impact analysis, the Bureau assumes for a representative moderate-complexity tier 2 open-end reporter that the one-time costs of starting open-end reporting in 2022 will be approximately equal to the one-time cost estimate for closed-end reporting that the Bureau estimated in the 2015 HMDA Rule, instead of being about one half of the one-time cost estimate for closed-end reporting. This translates to about $250,000 per representative moderate-complexity tier 2 open-end reporter, instead of $125,000 as the Bureau estimated in the 2015 HMDA Rule regarding the one-time costs of open-end reporting. This is the case regardless of whether the open-end reporters also report closed-end mortgage loans under HMDA. The Bureau notes that the moderate-complexity tier 2 financial institutions that will be permanently excluded from open-end reporting under this final rule will no longer have to incur such one-time costs.

Second, the temporary threshold that the 2017 HMDA Rule and 2019 HMDA Rule established delayed open-end reporting for those low-complexity tier 3 financial institutions that originated between 100 and 499 open-end lines of credit in either of the two preceding years. This delay means that those institutions would have had to incur the one-time costs to restart the training process for staff directly responsible for open-end data collection and reporting and update compliance procedures and manuals if the open-end threshold had reverted to 100 starting in 2022. In the 2015 HMDA Rule, the Bureau estimated the total one-time cost estimate for low-complexity tier 3 financial institutions would be approximately $3,000 regardless of whether the financial institution reports open-end lines of credit. Under this final rule, the Bureau thus assumes that the low-complexity tier 3 financial institutions that will be completely excluded from open-end reporting will be able to avoid incurring a one-time cost of about $3,000.

The Bureau estimates that, with the permanent threshold increased to 200 starting in 2022 as compared to reverting to 100, about 401 more institutions will be excluded from reporting open-end lines of credit starting in 2022. About 309 of those 401 institutions are low-complexity tier 3 open-end reporters, about 92 are moderate-complexity tier 2 open-end reporters, and none are high-complexity tier 1 reporters. Using the estimates of savings on one-time costs for open-end lines of credit for representative financial institutions discussed above, the Bureau estimates that with the increase in the threshold to 200 open-end lines of credit starting in 2022, the excluded institutions will receive an aggregate savings in avoided one-time cost associated with open-end lines of credit of about $23.9 million. This is an upward revision from the estimated savings of about $3.7 million in avoided one-time costs in the May 2019 Proposal, mainly because the Bureau has supplemented its analysis with new information from the 2018 HMDA data. As discussed above, these data allow the Bureau to develop estimates based on the total number of open-end loan/application register records rather than the number of open-end originations, and as a result the Bureau has shifted more affected institutions from tier 3 to tier 2. The overall analysis, however, is consistent with the Bureau's methodology and conclusions from the May 2019 Proposal.

Costs to Covered Persons

Like any new regulation or revision to the existing regulations, financial institutions may incur certain one-time costs adapting to the changes to the regulation. Based on the Bureau's outreach to stakeholders, the Bureau understands that most of such one-time costs would result from interpreting and implementing the regulatory changes, not from purchasing software upgrades or turning off the existing reporting functionality that the excluded institutions already built or purchased prior to the new changes taking its effect.

The Bureau sought comment on the costs and benefits to institutions that the rule would exclude pursuant to the proposed increases to the open-end threshold. No commenter expressed concern that the costs for newly excluded reporters would be substantial.

Benefits to Consumers

Having generated estimates of the reduction in ongoing costs on covered financial institutions due to the increase in the open-end threshold, the Bureau then attempts to estimate the potential pass-through of such cost reduction from the lenders to consumers, which could benefit consumers and affect credit access. According to economic theory, in a perfectly competitive market where financial institutions are profit maximizers, the affected financial institutions would pass on to consumers the marginal, *i.e.,* variable, cost savings per application or origination, and absorb the one-time and increased fixed costs of complying with the rule.

The Bureau estimated in the 2015 HMDA Rule that the rule would increase variable costs by $41.50 per open-end line of credit application for representative low-complexity tier 3 institutions and $6.20 per open-end line of credit application for representative moderate-complexity tier 2 institutions. If the market is perfectly competitive, all of these savings on variable costs by the excluded open-end reporters could potentially be passed through to the consumers. These expenses will be amortized over the life of a loan and may represent a negligible reduction in the cost of a mortgage loan. As a point of reference, the median loan amount of

open-end lines of credit (excluding reverse mortgages) in the 2018 HMDA data was $75,000.[185] The Bureau notes that the market structure in the consumer mortgage lending market may differ from that of a perfectly competitive market (for instance due to information asymmetry between lenders and borrowers) in which case the pass-through to the consumers would most likely be smaller than the pass-through under the perfect competition assumption.[186]

Costs to Consumers

Setting the permanent open-end threshold at 200 starting in 2022 will reduce the open-end data submitted under HMDA. As a result, HMDA data on these institutions' open-end lines of credit and applications will no longer be available to regulators, public officials, and members of the public. The decreased data concerning affected financial institutions may lead to adverse outcomes for some consumers. For instance, reporting data on open-end line of credit applications and originations and on certain demographic characteristics of applicants and borrowers could help the regulators and public officials better understand the type of funds that are flowing from lenders to consumers and consumers' need for mortgage credit. Open-end line of credit data that may be relevant to underwriting decisions may also help improve the processes used to identify possible discriminatory lending patterns and enforce antidiscrimination statutes. The Bureau has no quantitative data that can sufficiently measure the magnitude of any such impact of setting the permanent open-end threshold at 200. Additionally, the Bureau sought comment on the costs to consumers associated with the proposed increase to the open-end threshold but did not receive any comments that quantify the losses.

F. Potential Specific Impacts of the Final Rule

1. Depository Institutions and Credit Unions With $10 Billion or Less in Total Assets, as Described in Section 1026

As discussed above, the final rule will increase the threshold for reporting data about closed-end mortgage loans from 25 to 100 originations in both of the preceding two calendar years and increase the permanent threshold for reporting data about open-end lines of credit from 100 to 200 open-end lines of credit in both of the preceding two calendar years starting in 2022.

Both sets of provisions focus on burden reduction for smaller institutions. Therefore, the Bureau believes that the benefits of this final rule to depository institutions and credit unions with $10 billion or less in total assets will be similar to the benefit to creditors as a whole, as discussed above.

For the closed-end threshold provision, the Bureau estimates that for depository institutions and credit unions with $10 billion in assets or less that would have been required to report under the 2015 HMDA Rule, and are not partially exempt under the EGRRCPA, the savings on the annual operational costs from being excluded from closed-end reporting under the proposal will be approximately $4,500 for a representative low-complexity tier 3 institution, $44,700 for a representative moderate-complexity tier 2 institution, and $343,000 for a representative high-complexity tier 1 institution that fall below the threshold of 100. For depository institutions and credit unions with $10 billion in assets or less that would have been required to report under the 2015 HMDA Rule, but are partially exempt under the EGRRCPA, the Bureau estimates the savings on the annual operational costs from not reporting any closed-end mortgage data under the final rule will be approximately $2,200 for a representative low-complexity tier 3 institution, $32,800 for a representative moderate-complexity tier 2 institution, and $309,000 for a representative high-complexity tier 1 institution. For purposes of this final rule, the Bureau estimates that about 1,640 of the approximately 1,700 institutions that will be excluded by the reporting threshold of 100 closed-end mortgage loans are small depository institutions or credit unions with assets at or below $10 billion, and all but three of them are already partially exempt under the EGRRCPA. About 1,560 of them are similar to representative low-complexity tier 3 institution, with the rest being moderate-complexity tier 2 institutions. Combined, the annual savings on operational costs for depository institutions and credit unions with $10 billion or less in assets newly excluded under the threshold of 100 closed-end mortgage loans will be about $6.0 million.[187]

For the open-end threshold provisions, the Bureau estimates that for depository institutions and credit unions with $10 billion in assets or less that will not have to report open-end lines of credit under the final rule, the reduction in annual ongoing operational costs for the excluded institutions not eligible for the partial exemption for open-end lines of credit under the EGRRCPA will be approximately $8,800, $44,700, and $281,000 per year, for representative low-, moderate-, and high-complexity financial institutions, respectively. The Bureau estimates that the reduction in annual ongoing operational costs for excluded institutions already partially exempt for open-end lines of credit under the EGRRCPA will be approximately $4,300, $21,900, and $138,000 annually, for representative low-, moderate-, and high-complexity financial institutions, respectively. The Bureau estimates that about 378 of the approximately 401 institutions that will be excluded from open-end reporting starting in 2022 under the final rule are small depository institutions or credit unions with assets at or below $10 billion, and about 372 of them are already partially exempt under the EGRRCPA. Combined, the Bureau estimates that the annual saving on operational costs for depository institutions and credit unions with $10 billion or less in assets newly excluded from open-end reporting under the threshold of 200 open-end lines of credit in this final rule would be about $3.5. million per year starting in 2022. Using the estimates of savings on one-time costs for open-end lines of credit for representative financial institutions discussed above, the Bureau estimates that by increasing the open-end

[185] *See* Bureau of Consumer Fin. Prot., ''Introducing New and Revised Data Points in HMDA: Initial Observations from New and Revised Data Points in 2018 HMDA'' (Aug. 2019), *https://www.consumerfinance.gov/data-research/research-reports/introducing-new-revised-data-points-hmda/*.

[186] The further the market moves away from a perfectly competitive market, the smaller the pass-through would be.

[187] In comparison, in the May 2019 Proposal, the Bureau estimated that about 1,666 of the approximately 1,720 institutions that would be excluded from the proposed alternative 100 loan closed-end reporting threshold were small depository institutions or credit unions with assets at or below $10 billion, and all but two of them were already partially exempt under the EGRRCPA. About 1,573 of them are similar to representative low-complexity tier 3 institution, with the rest being moderate-complexity tier 2 institutions. Due to a transcription error, the Bureau indicated in the May 2019 Proposal that, combined, the annual saving on operational costs for depository institutions and credit unions with $10 billion or less in assets newly excluded under the proposed threshold of 100 closed-end mortgage loans would be about $4.8 million; however, upon review, the Bureau has determined that that estimate should instead have been $6.7 million based on the analysis in the May 2019 Proposal. As noted above, using the 2018 HMDA data, the Bureau now estimates that there will be approximately $6.0 million estimated savings in annual operational costs under threshold of 100 closed-end mortgage loans.

threshold to 200 starting in 2022, the excluded depository institutions and credit unions with $10 billion or less in assets will receive an aggregate savings in avoided one-time costs associated with open-end lines of credit of about $20.9 million.[188]

2. Impact of the Provisions on Consumers in Rural Areas

The final rule will not directly impact consumers in rural areas. However, as with all consumers, consumers in rural areas may be impacted indirectly. This would occur if financial institutions serving rural areas are HMDA reporters (in which case the final rule will lead to decreased information in rural areas) and if these institutions pass on some or all of the cost reduction to consumers (in which case, some consumers could benefit).

Recent research suggests that financial institutions that primarily serve rural areas are generally not HMDA reporters.[189] The Housing Assistance Council (HAC) suggests that the current asset and geographic coverage criteria already in place disproportionately exempt small lenders operating in rural communities. For example, HAC uses 2009 Call Report data to show that approximately 700 FDIC-insured lending institutions had assets totaling less than the HMDA institutional coverage threshold and were headquartered in rural communities. These institutions, which would not be HMDA reporters, may represent one of the few sources of credit for many rural areas. Some research also suggests that limited HMDA data are currently reported for rural areas, especially areas further from Metropolitan Statistical Areas (MSAs).[190] If a large portion of the rural housing market is serviced by financial institutions that are already not HMDA reporters, any indirect impact of the changes on consumers in rural areas would be limited, as the changes directly involve none of those financial institutions.

However, although some research suggests that HMDA currently does not cover a significant number of financial institutions serving the rural housing market, HMDA data do contain information for some covered loans involving properties in rural areas. These data can be used to estimate the number of HMDA reporters servicing rural areas, and the number of consumers in rural areas that might potentially be affected by the changes to Regulation C. For this analysis, the Bureau uses non-MSA areas as a proxy for rural areas, with the understanding that portions of MSAs and non-MSAs may contain urban and rural territory and populations. In 2018, 4,773 HMDA reporters reported applications or purchased loans for property located in geographic areas outside of an MSA. In total, these 5,207 financial institutions reported 1,562,399 applications or purchased loans for properties in non-MSA areas. This number provides an upper-bound estimate of the number of consumers in rural areas that could be impacted indirectly by the changes. In general, individual financial institutions report small numbers of covered loans from non-MSAs, as approximately 76 percent reported fewer than 100 covered loans from non-MSAs.

Following microeconomic principles, the Bureau believes that financial institutions will pass on reduced variable costs to future mortgage applicants, but absorb one-time costs and increased fixed costs if financial institutions are profit maximizers and the market is perfectly competitive.[191] The Bureau defines variable costs as costs that depend on the number of applications received. Based on initial outreach efforts, the following five operational steps affect variable costs: Transcribing data, resolving reportability questions, transferring data to an HMS, geocoding, and researching questions. The primary impact of the final rule on these operational steps is a reduction in time spent per task. Overall, the Bureau estimates that the impact of the final rule on variable costs per application is to reduce variable costs by no more than $42 for a representative low-complexity tier 3 financial institution, $6 for a representative moderate-complexity tier 2 financial institution, and $3 for a representative high-complexity tier 1 financial institution.[192] The 4,773 financial institutions that serviced rural areas could attempt to pass these reduced variable costs on to all future mortgage customers, including the estimated 1.6 million consumers from rural areas. Amortized over the life of the loan, this expense likely represents a negligible reduction in the cost of a mortgage loan. The Bureau notes that the market structure in the consumer mortgage lending market may differ from that of a perfectly competitive market (for instance due to information asymmetry between lenders and borrowers) in which case the pass-through to the consumers would most likely be smaller than the pass-through under the perfect competition assumption.[193]

The rural market may differ from non-rural markets in terms of market structure, demand, supply, and competition level. For instance, local or community banks may be more likely to serve some rural markets than national lenders. Therefore, consumers in rural areas may experience benefits and costs from the final rule that are different than those experienced by consumers in general. To the extent that the impacts of the final rule on creditors differ by type of creditor, this may affect the costs and benefits of the final rule on consumers in rural areas.

The Bureau also recognizes, as discussed in the section-by-section analysis of § 1003.2(g) above, that rural and low-to-moderate income census tracts will lose proportionately more data as the threshold increases than other areas. However, the Bureau currently lacks sufficient data to quantify the impact of this decrease in data.

VIII. Final Regulatory Flexibility Act Analysis

The Regulatory Flexibility Act[194] as amended by the Small Business Regulatory Enforcement Fairness Act of

[188] In comparison, in the May 2019 Proposal, the Bureau estimated that the annual saving on operational costs for depository institutions and credit unions with $10 billion or less in assets newly excluded from open-end reporting under the threshold of 200 open-end lines of credit would be about $19. million. Also, in the May 2019 Proposal, the Bureau estimated the aggregate savings in avoided one-time cost associated with the threshold of 200 open-end lines of credit would be $3.8 million. The increases in the estimated cost savings in this final rule for both annual ongoing costs and one-time costs are due to the fact that the Bureau's updated estimates are able to incorporate the number of applications instead of originations based on information supplemented by the 2018 HMDA data.

[189] *See, e.g.,* Keith Wiley, ''What Are We Missing? HMDA Asset-Excluded Filers,'' Hous. Assistance Council (2011), *http://ruralhome.org/storage/documents/smallbanklending.pdf;* Lance George & Keith Wiley, ''Improving HMDA: A Need to Better Understand Rural Mortgage Markets,'' Hous. Assistance Council (2010), *http://www.ruralhome.org/storage/documents/notehmdasm.pdf.*

[190] *See* Robert B. Avery *et al.,* ''Opportunities and Issues in Using HMDA Data,'' 29 J. of Real Est. Res. 352 (2007).

[191] If markets are not perfectly competitive or financial institutions are not profit maximizers, then what financial institutions pass on may differ. For example, they may attempt to pass on one-time costs and increases in fixed costs, or they may not be able to pass on variable costs.

[192] These cost estimates represent the highest estimates among the estimates presented in previous sections and form the upper bound of possible savings.

[193] The further the market moves away from a perfectly competitive market, the smaller the pass-through would be.

[194] Public Law 96–354, 94 Stat. 1164 (1980).

1996 [195] (RFA) requires each agency to consider the potential impact of its regulations on small entities, including small businesses, small governmental units, and small not-for-profit organizations.[196] The RFA defines a ''small business'' as a business that meets the size standard developed by the Small Business Administration pursuant to the Small Business Act.[197]

The RFA generally requires an agency to conduct an initial regulatory flexibility analysis (IRFA) and a final regulatory flexibility analysis (FRFA) of any rule subject to notice-and-comment rulemaking requirements, unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities.[198] The Bureau also is subject to certain additional procedures under the RFA involving the convening of a panel to consult with small business representatives prior to proposing a rule for which an IRFA is required.[199]

As discussed above, this final rule increases the threshold for reporting data about closed-end mortgage loans from 25 to 100 originations in each of the two preceding calendar years and sets the permanent open-end threshold at 200 originations when the temporary threshold of 500 originations expires in 2022. The section 1022(b)(2) analysis above describes how this final rule reduces the costs and burdens on covered persons, including small entities. Additionally, as described in the analysis above, a small entity that is in compliance with the law at such time when this final rule takes effect does not need to take any additional action to remain in compliance other than choosing to switch off all or parts of reporting systems and functions. Based on these considerations, the final rule does not have a significant economic impact on any small entities.

Accordingly, the Director hereby certifies that this final rule will not have a significant economic impact on a substantial number of small entities. Thus, neither an FRFA nor a small business review panel is required for this final rule.

[195] Public Law 104–21, section 241, 110 Stat. 847, 864–65 (1996).

[196] 5 U.S.C. 601–612. The term '' 'small organization' means any not-for-profit enterprise which is independently owned and operated and is not dominant in its field, unless an agency establishes [an alternative definition under notice and comment].'' 5 U.S.C. 601(4). The term '' 'small governmental jurisdiction' means governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand, unless an agency establishes [an alternative definition after notice and comment].'' 5 U.S.C. 601(5).

[197] 5 U.S.C. 601(3). The Bureau may establish an alternative definition after consulting with the Small Business Administration and providing an opportunity for public comment. *Id.*

[198] 5 U.S.C. 601–612.

[199] 5 U.S.C. 609.

IX. Paperwork Reduction Act

Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501 *et seq.*), Federal agencies are generally required to seek the Office of Management and Budget's (OMB's) approval for information collection requirements prior to implementation. The collections of information related to Regulation C have been previously reviewed and approved by OMB and assigned OMB Control number 3170–0008. Under the PRA, the Bureau may not conduct or sponsor and, notwithstanding any other provision of law, a person is not required to respond to an information collection unless the information collection displays a valid control number assigned by OMB. The Bureau has determined that this final rule would not impose any new or revised information collection requirements (recordkeeping, reporting or disclosure requirements) on covered entities or members of the public that would constitute collections of information requiring OMB approval under the PRA.

X. Congressional Review Act

Pursuant to the Congressional Review Act,[200] the Bureau will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to the rule's published effective date. The Office of Information and Regulatory Affairs has designated this rule as not a ''major rule'' as defined by 5 U.S.C. 804(2).

XI. Signing Authority

The Director of the Bureau, having reviewed and approved this document is delegating the authority to electronically sign this document to Laura Galban, a Bureau Federal Register Liaison, for purposes of publication in the **Federal Register**.

List of Subjects in 12 CFR Part 1003

Banks, Banking, Credit unions, Mortgages, National banks, Reporting and recordkeeping requirements, Savings associations.

Authority and Issuance

For the reasons set forth above, the Bureau amends Regulation C, 12 CFR part 1003, as follows:

[200] 5 U.S.C. 801 *et seq.*

PART 1003—HOME MORTGAGE DISCLOSURE (REGULATION C)

■ 1. The authority citation for part 1003 continues to read as follows:

Authority: 12 U.S.C. 2803, 2804, 2805, 5512, 5581.

■ 2. Effective July 1, 2020, § 1003.2 is amended by revising paragraphs (g)(1)(v)(A) and (g)(2)(ii)(A) to read as follows:

§ 1003.2 Definitions.

* * * * *

(g) * * *

(1) * * *

(v) * * *

(A) In each of the two preceding calendar years, originated at least 100 closed-end mortgage loans that are not excluded from this part pursuant to § 1003.3(c)(1) through (10) or (c)(13); or

* * * * *

(2) * * *

(ii) * * *

(A) In each of the two preceding calendar years, originated at least 100 closed-end mortgage loans that are not excluded from this part pursuant to § 1003.3(c)(1) through (10) or (c)(13); or

* * * * *

■ 3. Effective July 1, 2020, § 1003.3 is amended by revising paragraph (c)(11) to read as follows:

§ 1003.3 Exempt institutions and excluded and partially exempt transactions.

* * * * *

(c) * * *

(11) A closed-end mortgage loan, if the financial institution originated fewer than 100 closed-end mortgage loans in either of the two preceding calendar years; a financial institution (including, for purposes of information collected in 2020, an institution that was a financial institution as of January 1, 2020) may collect, record, report, and disclose information, as described in §§ 1003.4 and 1003.5, for such an excluded closed-end mortgage loan as though it were a covered loan, provided that the financial institution complies with such requirements for all applications for closed-end mortgage loans that it receives, closed-end mortgage loans that it originates, and closed-end mortgage loans that it purchases that otherwise would have been covered loans during the calendar year during which final action is taken on the excluded closed-end mortgage loan;

* * * * *

■ 4. Effective July 1, 2020, supplement I to part 1003 is amended as follows:

■ a. Under *Section 1003.2—Definitions,* revise *2(g) Financial Institution.*

■ b. Under *Section 1003.3—Exempt Institutions and Excluded and Partially Exempt Transactions,* under *3(c) Excluded Transactions,* revise *Paragraph 3(c)(11).*

The revisions read as follows:

Supplement I to Part 1003—Official Interpretations

* * * * *

Section 1003.2—Definitions

* * * * *

2(g) Financial Institution

1. *Preceding calendar year and preceding December 31.* The definition of financial institution refers both to the preceding calendar year and the preceding December 31. These terms refer to the calendar year and the December 31 preceding the current calendar year. For example, in 2021, the preceding calendar year is 2020, and the preceding December 31 is December 31, 2020. Accordingly, in 2021, Financial Institution A satisfies the asset-size threshold described in § 1003.2(g)(1)(i) if its assets exceeded the threshold specified in comment 2(g)–2 on December 31, 2020. Likewise, in 2021, Financial Institution A does not meet the loan-volume test described in § 1003.2(g)(1)(v)(A) if it originated fewer than 100 closed-end mortgage loans during either 2019 or 2020.

2. *Adjustment of exemption threshold for banks, savings associations, and credit unions.* For data collection in 2020, the asset-size exemption threshold is $47 million. Banks, savings associations, and credit unions with assets at or below $47 million as of December 31, 2019, are exempt from collecting data for 2020.

3. *Merger or acquisition—coverage of surviving or newly formed institution.* After a merger or acquisition, the surviving or newly formed institution is a financial institution under § 1003.2(g) if it, considering the combined assets, location, and lending activity of the surviving or newly formed institution and the merged or acquired institutions or acquired branches, satisfies the criteria included in § 1003.2(g). For example, A and B merge. The surviving or newly formed institution meets the loan threshold described in § 1003.2(g)(1)(v)(B) if the surviving or newly formed institution, A, and B originated a combined total of at least 500 open-end lines of credit in each of the two preceding calendar years. Likewise, the surviving or newly formed institution meets the asset-size threshold in § 1003.2(g)(1)(i) if its assets and the combined assets of A and B on December 31 of the preceding calendar year exceeded the threshold described in § 1003.2(g)(1)(i). Comment 2(g)–4 discusses a financial institution's responsibilities during the calendar year of a merger.

4. *Merger or acquisition—coverage for calendar year of merger or acquisition.* The scenarios described below illustrate a financial institution's responsibilities for the calendar year of a merger or acquisition. For purposes of these illustrations, a ''covered institution'' means a financial institution, as defined in § 1003.2(g), that is not exempt from reporting under § 1003.3(a), and ''an institution that is not covered'' means either an institution that is not a financial institution, as defined in § 1003.2(g), or an institution that is exempt from reporting under § 1003.3(a).

i. Two institutions that are not covered merge. The surviving or newly formed institution meets all of the requirements necessary to be a covered institution. No data collection is required for the calendar year of the merger (even though the merger creates an institution that meets all of the requirements necessary to be a covered institution). When a branch office of an institution that is not covered is acquired by another institution that is not covered, and the acquisition results in a covered institution, no data collection is required for the calendar year of the acquisition.

ii. A covered institution and an institution that is not covered merge. The covered institution is the surviving institution, or a new covered institution is formed. For the calendar year of the merger, data collection is required for covered loans and applications handled in the offices of the merged institution that was previously covered and is optional for covered loans and applications handled in offices of the merged institution that was previously not covered. When a covered institution acquires a branch office of an institution that is not covered, data collection is optional for covered loans and applications handled by the acquired branch office for the calendar year of the acquisition.

iii. A covered institution and an institution that is not covered merge. The institution that is not covered is the surviving institution, or a new institution that is not covered is formed. For the calendar year of the merger, data collection is required for covered loans and applications handled in offices of the previously covered institution that took place prior to the merger. After the merger date, data collection is optional for covered loans and applications handled in the offices of the institution that was previously covered. When an institution remains not covered after acquiring a branch office of a covered institution, data collection is required for transactions of the acquired branch office that take place prior to the acquisition. Data collection by the acquired branch office is optional for transactions taking place in the remainder of the calendar year after the acquisition.

iv. Two covered institutions merge. The surviving or newly formed institution is a covered institution. Data collection is required for the entire calendar year of the merger. The surviving or newly formed institution files either a consolidated submission or separate submissions for that calendar year. When a covered institution acquires a branch office of a covered institution, data collection is required for the entire calendar year of the merger. Data for the acquired branch office may be submitted by either institution.

5. *Originations.* Whether an institution is a financial institution depends in part on whether the institution originated at least 100 closed-end mortgage loans in each of the two preceding calendar years or at least 500 open-end lines of credit in each of the two preceding calendar years. Comments 4(a)–2 through –4 discuss whether activities with respect to a particular closed-end mortgage loan or open-end line of credit constitute an origination for purposes of § 1003.2(g).

6. *Branches of foreign banks—treated as banks.* A Federal branch or a State-licensed or insured branch of a foreign bank that meets the definition of a ''bank'' under section 3(a)(1) of the Federal Deposit Insurance Act (12 U.S.C. 1813(a)) is a bank for the purposes of § 1003.2(g).

7. *Branches and offices of foreign banks and other entities—treated as nondepository financial institutions.* A Federal agency, State-licensed agency, State-licensed uninsured branch of a foreign bank, commercial lending company owned or controlled by a foreign bank, or entity operating under section 25 or 25A of the Federal Reserve Act, 12 U.S.C. 601 and 611 (Edge Act and agreement corporations) may not meet the definition of ''bank'' under the Federal Deposit Insurance Act and may thereby fail to satisfy the definition of a depository financial institution under § 1003.2(g)(1). An entity is nonetheless a financial institution if it meets the definition of nondepository financial institution under § 1003.2(g)(2).

* * * * *

Section 1003.3—Exempt Institutions and Excluded and Partially Exempt Transactions

* * * * *

3(c) Excluded Transactions

* * * * *

Paragraph 3(c)(11)

1. *General.* Section 1003.3(c)(11) provides that a closed-end mortgage loan is an excluded transaction if a financial institution originated fewer than 100 closed-end mortgage loans in either of the two preceding calendar years. For example, assume that a bank is a financial institution in 2021 under § 1003.2(g) because it originated 600 open-end lines of credit in 2019, 650 open-end lines of credit in 2020, and met all of the other requirements under § 1003.2(g)(1). Also assume that the bank originated 75 and 90 closed-end mortgage loans in 2019 and 2020, respectively. The open-end lines of credit that the bank originated or purchased, or for which it received applications, during 2021 are covered loans and must be reported, unless they otherwise are excluded transactions under § 1003.3(c). However, the closed-end mortgage loans that the bank originated or purchased, or for which it received applications, during 2021 are excluded transactions under § 1003.3(c)(11) and need not be reported. See comments 4(a)–2 through –4 for guidance about the activities that constitute an origination.

2. *Optional reporting.* A financial institution may report applications for, originations of, or purchases of closed-end mortgage loans that are excluded transactions because the financial institution originated fewer than 100 closed-end mortgage loans in either of the two preceding calendar years. However, a financial institution that chooses to report such excluded applications for, originations of, or purchases of closed-end mortgage loans must report all such

applications for closed-end mortgage loans that it receives, closed-end mortgage loans that it originates, and closed-end mortgage loans that it purchases that otherwise would be covered loans for a given calendar year. Note that applications which remain pending at the end of a calendar year are not reported, as described in comment 4(a)(8)(i)–14. An institution that was a financial institution as of January 1, 2020 but is not a financial institution on July 1, 2020 because it originated fewer than 100 closed-end mortgage loans in 2018 or 2019 is not required in 2021 to report, but may report, applications for, originations of, or purchases of closed-end mortgage loans for calendar year 2020 that are excluded transactions because the institution originated fewer than 100 closed-end mortgage loans in 2018 or 2019. However, an institution that was a financial institution as of January 1, 2020 and chooses to report such excluded applications for, originations of, or purchases of closed-end mortgage loans in 2021 must report all such applications for closed-end mortgage loans that it receives, closed-end mortgage loans that it originates, and closed-end mortgage loans that it purchases that otherwise would be covered loans for all of calendar year 2020.

* * * * *

■ 5. Effective January 1, 2022, § 1003.2, as amended at 84 FR 57946, October 29, 2019, is further amended by revising paragraphs (g)(1)(v)(B) and (g)(2)(ii)(B) to read as follows:

§ 1003.2 Definitions.

* * * * *

(g) * * *

(1) * * *

(v) * * *

(B) In each of the two preceding calendar years, originated at least 200 open-end lines of credit that are not excluded from this part pursuant to § 1003.3(c)(1) through (10); and

* * * * *

(2) * * *

(ii) * * *

(B) In each of the two preceding calendar years, originated at least 200 open-end lines of credit that are not excluded from this part pursuant to § 1003.3(c)(1) through (10).

* * * * *

■ 6. Effective January 1, 2022, § 1003.3, is amended by revising paragraph (c)(11) and as amended at 84 FR 57946, October 29, 2019, is further amended by revising paragraph (c)(12) to read as follows:

§ 1003.3 Exempt institutions and excluded and partially exempt transactions.

* * * * *

(c) * * *

(11) A closed-end mortgage loan, if the financial institution originated fewer than 100 closed-end mortgage loans in either of the two preceding calendar years; a financial institution may collect, record, report, and disclose information, as described in §§ 1003.4 and 1003.5, for such an excluded closed-end mortgage loan as though it were a covered loan, provided that the financial institution complies with such requirements for all applications for closed-end mortgage loans that it receives, closed-end mortgage loans that it originates, and closed-end mortgage loans that it purchases that otherwise would have been covered loans during the calendar year during which final action is taken on the excluded closed-end mortgage loan;

(12) An open-end line of credit, if the financial institution originated fewer than 200 open-end lines of credit in either of the two preceding calendar years; a financial institution may collect, record, report, and disclose information, as described in §§ 1003.4 and 1003.5, for such an excluded open-end line of credit as though it were a covered loan, provided that the financial institution complies with such requirements for all applications for open-end lines of credit that it receives, open-end lines of credit that it originates, and open-end lines of credit that it purchases that otherwise would have been covered loans during the calendar year during which final action is taken on the excluded open-end line of credit; or

* * * * *

■ 7. Effective January 1, 2022, supplement I to part 1003, as amended at 84 FR 57946, October 29, 2019, is further amended as follows:

■ a. Under *Section 1003.2—Definitions,* revise *2(g) Financial Institution;* and

■ b. Under *Section 1003.3—Exempt Institutions and Excluded and Partially Exempt Transactions,* under *3(c) Excluded Transactions,* revise *Paragraphs 3(c)(11) and 3(c)(12).*

The revisions read as follows:

Supplement I to Part 1003—Official Interpretations

* * * * *

Section 1003.2—Definitions

* * * * *

2(g) Financial Institution

1. *Preceding calendar year and preceding December 31.* The definition of financial institution refers both to the preceding calendar year and the preceding December 31. These terms refer to the calendar year and the December 31 preceding the current calendar year. For example, in 2021, the preceding calendar year is 2020, and the preceding December 31 is December 31, 2020. Accordingly, in 2021, Financial Institution A satisfies the asset-size threshold described in § 1003.2(g)(1)(i) if its assets exceeded the threshold specified in comment 2(g)–2 on December 31, 2020. Likewise, in 2021, Financial Institution A does not meet the loan-volume test described in § 1003.2(g)(1)(v)(A) if it originated fewer than 100 closed-end mortgage loans during either 2019 or 2020.

2. [Reserved]

3. *Merger or acquisition—coverage of surviving or newly formed institution.* After a merger or acquisition, the surviving or newly formed institution is a financial institution under § 1003.2(g) if it, considering the combined assets, location, and lending activity of the surviving or newly formed institution and the merged or acquired institutions or acquired branches, satisfies the criteria included in § 1003.2(g). For example, A and B merge. The surviving or newly formed institution meets the loan threshold described in § 1003.2(g)(1)(v)(B) if the surviving or newly formed institution, A, and B originated a combined total of at least 200 open-end lines of credit in each of the two preceding calendar years. Likewise, the surviving or newly formed institution meets the asset-size threshold in § 1003.2(g)(1)(i) if its assets and the combined assets of A and B on December 31 of the preceding calendar year exceeded the threshold described in § 1003.2(g)(1)(i). Comment 2(g)–4 discusses a financial institution's responsibilities during the calendar year of a merger.

4. *Merger or acquisition—coverage for calendar year of merger or acquisition.* The scenarios described below illustrate a financial institution's responsibilities for the calendar year of a merger or acquisition. For purposes of these illustrations, a ''covered institution'' means a financial institution, as defined in § 1003.2(g), that is not exempt from reporting under § 1003.3(a), and ''an institution that is not covered'' means either an institution that is not a financial institution, as defined in § 1003.2(g), or an institution that is exempt from reporting under § 1003.3(a).

i. Two institutions that are not covered merge. The surviving or newly formed institution meets all of the requirements necessary to be a covered institution. No data collection is required for the calendar year of the merger (even though the merger creates an institution that meets all of the requirements necessary to be a covered institution). When a branch office of an institution that is not covered is acquired by another institution that is not covered, and the acquisition results in a covered institution, no data collection is required for the calendar year of the acquisition.

ii. A covered institution and an institution that is not covered merge. The covered institution is the surviving institution, or a new covered institution is formed. For the calendar year of the merger, data collection is required for covered loans and applications handled in the offices of the merged institution that was previously covered and is optional for covered loans and applications handled in offices of the merged institution that was previously not covered. When a covered institution acquires a branch office of an institution that is not covered, data collection is optional for covered loans and applications handled by the acquired

branch office for the calendar year of the acquisition.

iii. A covered institution and an institution that is not covered merge. The institution that is not covered is the surviving institution, or a new institution that is not covered is formed. For the calendar year of the merger, data collection is required for covered loans and applications handled in offices of the previously covered institution that took place prior to the merger. After the merger date, data collection is optional for covered loans and applications handled in the offices of the institution that was previously covered. When an institution remains not covered after acquiring a branch office of a covered institution, data collection is required for transactions of the acquired branch office that take place prior to the acquisition. Data collection by the acquired branch office is optional for transactions taking place in the remainder of the calendar year after the acquisition.

iv. Two covered institutions merge. The surviving or newly formed institution is a covered institution. Data collection is required for the entire calendar year of the merger. The surviving or newly formed institution files either a consolidated submission or separate submissions for that calendar year. When a covered institution acquires a branch office of a covered institution, data collection is required for the entire calendar year of the merger. Data for the acquired branch office may be submitted by either institution.

5. *Originations.* Whether an institution is a financial institution depends in part on whether the institution originated at least 100 closed-end mortgage loans in each of the two preceding calendar years or at least 200 open-end lines of credit in each of the two preceding calendar years. Comments 4(a)–2 through –4 discuss whether activities with respect to a particular closed-end mortgage loan or open-end line of credit constitute an origination for purposes of § 1003.2(g).

6. *Branches of foreign banks—treated as banks.* A Federal branch or a State-licensed or insured branch of a foreign bank that meets the definition of a ''bank'' under section 3(a)(1) of the Federal Deposit Insurance Act (12 U.S.C. 1813(a)) is a bank for the purposes of § 1003.2(g).

7. *Branches and offices of foreign banks and other entities—treated as nondepository financial institutions.* A Federal agency, State-licensed agency, State-licensed uninsured branch of a foreign bank, commercial lending company owned or controlled by a foreign bank, or entity operating under section 25 or 25A of the Federal Reserve Act, 12 U.S.C. 601 and 611 (Edge Act and agreement corporations) may not meet the definition of ''bank'' under the Federal Deposit Insurance Act and may thereby fail to satisfy the definition of a depository financial institution under § 1003.2(g)(1). An entity is nonetheless a financial institution if it meets the definition of nondepository financial institution under § 1003.2(g)(2).

* * * * *

Section 1003.3—Exempt Institutions and Excluded and Partially Exempt Transactions

* * * * *

3(c) Excluded Transactions

* * * * *

Paragraph 3(c)(11)

1. *General.* Section 1003.3(c)(11) provides that a closed-end mortgage loan is an excluded transaction if a financial institution originated fewer than 100 closed-end mortgage loans in either of the two preceding calendar years. For example, assume that a bank is a financial institution in 2022 under § 1003.2(g) because it originated 300 open-end lines of credit in 2020, 350 open-end lines of credit in 2021, and met all of the other requirements under § 1003.2(g)(1). Also assume that the bank originated 75 and 90 closed-end mortgage loans in 2020 and 2021, respectively. The open-end lines of credit that the bank originated or purchased, or for which it received applications, during 2022 are covered loans and must be reported, unless they otherwise are excluded transactions under § 1003.3(c). However, the closed-end mortgage loans that the bank originated or purchased, or for which it received applications, during 2022 are excluded transactions under § 1003.3(c)(11) and need not be reported. See comments 4(a)–2 through–4 for guidance about the activities that constitute an origination.

2. *Optional reporting.* A financial institution may report applications for, originations of, or purchases of closed-end mortgage loans that are excluded transactions because the financial institution originated fewer than 100 closed-end mortgage loans in either of the two preceding calendar years. However, a financial institution that chooses to report such excluded applications for, originations of, or purchases of closed-end mortgage loans must report all such applications for closed-end mortgage loans that it receives, closed-end mortgage loans that it originates, and closed-end mortgage loans that it purchases that otherwise would be covered loans for a given calendar year. Note that applications which remain pending at the end of a calendar year are not reported, as described in comment 4(a)(8)(i)–14.

Paragraph 3(c)(12)

1. *General.* Section 1003.3(c)(12) provides that an open-end line of credit is an excluded transaction if a financial institution originated fewer than 200 open-end lines of credit in either of the two preceding calendar years. For example, assume that a bank is a financial institution in 2022 under § 1003.2(g) because it originated 100 closed-end mortgage loans in 2020, 175 closed-end mortgage loans in 2021, and met all of the other requirements under § 1003.2(g)(1). Also assume that the bank originated 175 and 185 open-end lines of credit in 2020 and 2021, respectively. The closed-end mortgage loans that the bank originated or purchased, or for which it received applications, during 2022 are covered loans and must be reported, unless they otherwise are excluded transactions under § 1003.3(c). However, the open-end lines of credit that the bank originated or purchased, or for which it received applications, during 2022 are excluded transactions under § 1003.3(c)(12) and need not be reported. See comments 4(a)–2 through –4 for guidance about the activities that constitute an origination.

2. *Optional reporting.* A financial institution may report applications for, originations of, or purchases of open-end lines of credit that are excluded transactions because the financial institution originated fewer than 200 open-end lines of credit in either of the two preceding calendar years. However, a financial institution that chooses to report such excluded applications for, originations of, or purchases of open-end lines of credit must report all such applications for open-end lines of credit which it receives, open-end lines of credit that it originates, and open-end lines of credit that it purchases that otherwise would be covered loans for a given calendar year. Note that applications which remain pending at the end of a calendar year are not reported, as described in comment 4(a)(8)(i)–14.

* * * * *

Laura Galban,

Federal Register Liaison, Bureau of Consumer Financial Protection.

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Part IV

Department of Health and Human Services

Administration for Children and Families

45 CFR Part 1355

Adoption and Foster Care Analysis and Reporting System; Final Rule

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Administration for Children and Families

45 CFR Part 1355

RIN 0970–AC72

Adoption and Foster Care Analysis and Reporting System

AGENCY: Children's Bureau (CB); Administration on Children, Youth and Families (ACYF); Administration for Children and Families (ACF); Department of Health and Human Services (HHS).

ACTION: Final rule.

SUMMARY: This rule finalizes revisions to the Adoption and Foster Care Analysis and Reporting System (AFCARS) regulations proposed on April 19, 2019. AFCARS regulations require title IV–E agencies to collect and report data to ACF on children in out-of-home care, children who exit out-of-home care to adoption or legal guardianship, and children who are covered by a title IV–E adoption or guardianship assistance agreement.

DATES: This final rule is effective on July 13, 2020. As of May 12, 2020, the effective date for amendatory instructions 3 and 5, published December 14, 2016, at 81 FR 90524, and delayed August 21, 2018, at 83 FR 42225, are further delayed to October 1, 2022.

FOR FURTHER INFORMATION CONTACT: Kathleen McHugh, Director, Policy Division, Children's Bureau, (202) 205–8618, *cbcomments@acf.hhs.gov.*

SUPPLEMENTARY INFORMATION:

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I. Executive Summary per Executive Order 13563

Executive Order (E.O.) 13563 requires that regulations be accessible, consistent, written in plain language, and easy to understand. This means that regulatory preambles for lengthy or complex rules (both proposed and final) must include executive summaries. Below is the executive summary for this AFCARS final rule.

(1) *Purpose of the AFCARS final rule.*

(a) *The need for the regulatory action and how the action will meet that need:* On February 24, 2017, the President issued E.O. 13777 *Enforcing the Regulatory Reform Agenda* to lower regulatory burdens on the American people. It directed Federal agencies to establish a Regulatory Reform Task Force to review existing regulations and make recommendations regarding their repeal, replacement, or modification. The HHS Regulatory Reform Task Force identified the AFCARS final rule published on December 14, 2016 (81 FR 90524, hereafter referred to as the 2016 final rule) as one in which the reporting burden may impose costs that exceed benefits. In response to E.O. 13777, we published in the **Federal Register** an Advance Notice of Proposed Rulemaking on March 15, 2018 (83 FR 11449, hereafter referred to as the 2018 ANPRM), soliciting specific feedback on the 2016 final rule data elements. Based on the feedback we received and our review of the need for and utility of the data elements, we later published a streamlined proposal for AFCARS in a Notice of Proposed Rulemaking on April 19, 2019 (84 FR 16572, hereafter referred to as the 2019 NPRM). This final rule is an E.O. 13771 deregulatory action which finalizes the proposal in the 2019 NPRM to streamline the AFCARS data elements.

(b) *Legal authority for the final rule:* AFCARS is a data collection system for national adoption and foster care data authorized under section 479 of the Social Security Act (the Act). Section 479(c)(3)(A) of the Act requires the collection of comprehensive national information with respect to the demographic characteristics of children in foster care and those who are adopted with state involvement and their biological, foster, and adoptive parents. Section 474(f) of the Act requires HHS to impose penalties for non-compliant AFCARS data. Section 1102 of the Act instructs the Secretary to promulgate regulations necessary for the effective administration of the functions for which HHS is responsible under the Act.

(2) *Summary of the major provisions of the final rule.*

(a) *Out-of-home care data file data elements.* We finalize the out-of-home care data elements proposed in the 2019 NPRM. The out-of-home care data file in the 2016 final rule requires title IV–E agencies to report approximately 272 items; this final rule reduces the number of required items to approximately 183. This final rule does not include data elements asking for information on, among other things, the sexual orientation of the child, foster parent, adoptive parent, or legal guardian, and reduces data elements related to the Indian Child Welfare Act of 1978 (ICWA).

(b) *Conforming changes.* We made conforming changes to §§ 1355.40, 1355.41, 1355.43, 1355.45, and 1355.46 to update the citations or dates as a result of amendments in other sections.

(3) *Costs and benefits.* The benefits are that the streamlined AFCARS data elements will reduce the title IV–E agency reporting burden from the 2016 final rule, thus resulting in an estimated $46 million in total annual savings. (Affected entities will continue to incur $43 million in annual costs, net of Federal reimbursements, attributable to the 2016 final rule.)

II. Background on the AFCARS Final Rule: Data Elements and Decision Making

Prior to issuing the 2019 NPRM, we conducted an in-depth analysis of the 2018 ANPRM comments, held tribal consultation, consulted with HHS experts that use AFCARS data, consulted with representatives of the Department of Interior (DOI) regarding the ICWA-related data elements, and considered the concerns and interests of all stakeholders. We reviewed each data element in the 2016 final rule and evaluated whether it is needed for a specific purpose, such as a title IV–B or IV–E statutory requirement, program monitoring, Congressional reporting, or budgeting, and to specifically identify whether including the data element in AFCARS would improve the accuracy and reliability of the data. After careful consideration, we proposed in the 2019 NPRM to streamline the out-of-home care data elements to what we believe is a reasonable amount, while also reducing redundancies in the data elements. Additional details regarding this evaluative process and decision-making are available in the preamble of the 2019 NPRM (84 FR 16573).

We believe that the approach we took in determining the data elements to propose in the 2019 NPRM was comprehensive and inclusive of the purposes for which we will use the AFCARS data. We also understood that there have been several opportunities to comment on different iterations of AFCARS, so in the 2019 NPRM we provided specific guidance in section V. Public Participation on the type of comments that would be most useful to ACF in making decisions on the final rule. Specific considerations for commenters, included the following:

• How reporting the data elements in the 2019 NPRM will specifically enhance work with children and families.

• Why AFCARS is the most effective vehicle for collecting the data proposed in the 2019 NPRM and why no other current method is feasible to collect the information.

• How AFCARS data, which is aggregated at the national level, would help specific work with title IV–E agencies, children, and families.

III. Overview of 2019 Notice of Proposed Rulemaking Comments

The comment period for the 2019 NPRM was open for 60 days and closed on June 18, 2019. We received 150 comments from 24 states and local child welfare agencies; 33 Indian tribes, tribal organizations or consortiums; 10 organizations representing tribal interests; 45 national advocacy groups and universities; one Member of Congress; and 37 anonymous or private citizens. The comments are available in the docket for this action on *Regulations.gov*.

Summary of State and Local Child Welfare Agency Comments: The overwhelming majority of state and local agencies supported streamlining the data elements as proposed in the 2019 NPRM. Their cited reasons include that it balances the need for updated information with the burden of having to revise systems to report data and it keeps a focus on Federal compliance and continuous quality improvement rather than turning AFCARS data into a research tool by adding measures that do not or cannot accurately capture the realities of child welfare practice. They also believe that the proposal would enable caseworkers to spend more time working with families and engaging in case planning, rather than data entry. Half of the state and local child welfare agencies specifically commented on the proposal to remove the sexual orientation data elements for the child, foster parents, adoptive parents and legal guardians. Of those, the majority agreed with the proposal, expressing that AFCARS is not the appropriate vehicle to collect this information, that it was unclear how this information in a Federal Government database will result in support services for children, and that this information should be tracked separately from AFCARS. Eleven state and local child welfare agencies specifically commented on the proposal to simplify the ICWA-related data elements. Of those, the overwhelming majority were in favor of the proposal and agreed with our rationale to keep the data elements that are essential to understanding nationally the ICWA-applicable population of children in foster care, while removing those that were based on DOI regulations, qualitative in nature, or requirements of the courts. Further reduction in these data elements was also recommended due to an extremely low population of American Indian/Native Alaskan children in foster care in certain states.

Summary of Comments from Indian Tribes, Tribal Organizations or Consortiums, and Organizations Representing Tribal Interests: All Indian tribes, tribal organizations or consortiums, and organizations representing tribal interests opposed the proposal to reduce the ICWA-related data elements. In general, the commenters opposed streamlining primarily because they felt that all data elements in the 2016 final rule are needed to assess ICWA compliance, and that national information is important to address disparities, analyze outcomes, and help in working with Indian children and families. There were very few comments on the other data elements.

Summary of Comments from National Advocacy Organizations and Other Entities: The vast majority of the national advocacy organizations and other individuals or entities that commented expressed general opposition to the streamlining proposed in the 2019 NPRM. The commenters opposed streamlining for various reasons with the general sentiment being that the 2016 final rule would provide more insight into the foster care population, promote visibility for marginalized groups, and allow data-informed legislating, policy, and program decisions.

Comment Analysis

We reviewed and analyzed all of the 2019 NPRM comments and estimates provided and considered them in finalizing this rule and as it related to meeting the statutory requirements in § 479 of the Act to avoid unnecessary diversion of child welfare agency resources and to ensure that data collected is reliable and consistent. Our conclusion is that we do not have a sufficient justification, or a rational basis, for retaining the data elements proposed for removal, thus we did not make substantive changes in finalizing this rule. We received no new information that was convincingly articulated to persuade us to add in data elements from the 2016 final rule that were not proposed in the 2019 NPRM. In finalizing this rule, we maintain that we will collect the most critical information on the out-of-home care population from a national perspective while avoiding the unnecessary diversion of resources from title IV–E agencies, consistent with the statute authorizing AFCARS.

In drafting the 2019 NPRM, we balanced the commenters' desires for more information with the need to minimize burden pursuant to E.O. 13777 and to focus on improving quality of services and achieving positive outcomes for children and families. This final rule will provide ample data for analysis via a combination of information from the data elements and will provide more robust national information on children in foster care not available in the current AFCARS. Specific to ICWA, we maintain that the detailed ICWA-related information requirements promulgated in the 2016 final rule are not appropriate for AFCARS.

Lastly, our decision to not add data elements aligns with the statutory requirements in section 479 of the Act to avoid unnecessary diversion of agency resources and to ensure that the data collected is reliable and consistent. We address specific comments to the proposal in the beginning of V. Section-by-Section Discussion of Regulatory Provisions of this final rule.

IV. Implementation Timeframe

We are providing two fiscal years for title IV–E agencies to comply with §§ 1355.41 through 1355.47, which we believe is sufficient for title IV–E agencies to implement the changes necessary to comply with this final rule. State commenters to both the 2019 NPRM and the 2018 ANPRM indicated they would need sufficient time to make changes to their electronic case management systems to collect new information and train employees on new requirements, and suggested timeframes ranging from one to five fiscal years post publication of the final rule. A third of states that commented suggested two fiscal years post publication of the final rule would be acceptable. States also suggested that this final rule not be implemented until after the state has fully implemented a Comprehensive Child Welfare Information System (CCWIS). A few states recommended a phased-in approach to penalties and compliance with the AFCARS requirements, stating that penalties should not begin until after the implementation period ends.

During the implementation period, state and tribal title IV–E agencies must continue to report to ACF data related to children in foster care and those who have been adopted with title IV–E

agency involvement in accordance with § 1355.40 and the appendices to part 1355. It is essential for agencies to continue to report AFCARS data to ACF without interruption because AFCARS data is used for various reports, planning, and monitoring, and to make the Adoption and Legal Guardianship Incentive awards.

V. Section-by-Section Discussion of Regulatory Provisions and Responses to Comments

We respond to the comments we received in response to the 2019 NPRM in this section-by-section discussion. We also address in the section-by-section preamble whether we made any changes to our 2019 NPRM proposal. Before discussing each section of the final rule, we respond to the general comments we received in response to our 2019 NPRM proposal to streamline the data elements, reduce the ICWA-related data elements, and remove the data elements on the child/foster parent/adoptive parent/guardian's sexual orientation. Many comments we received iterated the same or similar information that fell into these broad categories and we believe that it is clearer for us to respond to similarly grouped comments in this way. Following these discussions is a discussion of specific sections of the 2019 NPRM.

Response to Comments on Streamlining the Data Elements

Comment: Indian tribes, commenters representing tribal interests, national advocacy organizations, and other commenters opposed streamlining the AFCARS data elements as proposed in the 2019 NPRM and requested that we re-institute the 2016 final rule in its entirety. Their common reasons for doing so were essentially the same as previously provided in response to the ANPRM and included that:

- The entire 2016 final rule will provide a comprehensive data set that will help us track outcomes, address disparities, and address a perceived need for research and legislation.
- ACF overstated the burden in the 2019 NPRM and did not consider that the information from additional data may lead to lower future costs because families would get the help they need.
- The 2016 final rule would promote visibility for marginalized groups and help us understand their particular experiences in foster care.
- Caseworkers should be collecting all of the information promulgated in the 2016 final rule as part of routine casework, so it should be in the case file and transmitted to ACF for AFCARS.

In contrast, the vast majority of state commenters supported the streamlined proposal and specified that a lower reporting burden will help their work with children and families by enabling caseworkers to spend less time on data entry.

Response: We considered the circumstances and capacity of all title IV–E agencies in setting the AFCARS requirements. The vast majority of commenters who opposed simplifying and reducing the data elements in the 2019 NPRM were not agencies responsible for reporting data to AFCARS. They reiterated similar justifications that they made in response to the 2018 ANPRM for including in this final rule all of the data elements promulgated in the 2016 final rule. The commenters did not provide additional evidence for collecting the data elements at a *Federal* level that we proposed to remove or simplify. The commenters that opposed streamlining did not elaborate on why AFCARS is the most effective vehicle for collecting the information required under the 2016 final rule that we proposed to remove, which in large part was qualitative data, describe work done to coordinate with title IV–E agencies in collecting and reporting data for AFCARS, or specify how the data we proposed to remove would help their specific work with children and families served by the title IV–E agency. The comments from non-title IV–E agencies, which opposed streamlining due to a perceived ''need'' for the data, lead us to believe that there is a misunderstanding of AFCARS and its functionality. The information that title IV–E agencies report to AFCARS is aggregated and de-identified at the national level, meaning it does not include names, numbers, or other information. This means that the data provides broad insight into the national population of children in foster care because AFCARS is designed to have a few response options that must be broad enough to capture a range of experiences across the country. The title IV–E agency extracts the information from electronic case files, via a programming code, and transmits it to ACF. Section 479 of the Act does not authorize us to collect *all* information from a title IV–E agency case file, nor would that be appropriate.

Response to Comments on Streamlining ICWA-Related Data Elements

Comment: In general, Indian tribes, commenters representing tribal interests, national advocacy organizations, a member of congress, and private individuals opposed our proposal to streamline the ICWA-related data elements and requested that we re-institute all of the ICWA-related data elements from the 2016 final rule for essentially the same reasons previously provided in response to the 2018 ANPRM including that:

- The 2019 NPRM was too drastic in streamlining the ICWA-related data elements and the information is needed to assess compliance with ICWA;
- Section 422(b)(9) in title IV–B of the Act includes processes regarding ICWA; and
- Unlike DOI, ACF has established relationships with states and the Federal AFCARS system in place to receive data on Native American children in state foster care systems, and therefore is better positioned to collect ICWA-related data.

Response: First, in this final rule, we are attempting to correct any confusion or misperception that we may have created by justifying the ICWA-related data elements in the 2016 final rule on the basis of consistency with DOI's final rule on ICWA (published on June 14, 2016, 81 FR 38778). DOI is the lead agency for ICWA compliance, statute, and regulations and HHS is not the cognizant authority over implementing, overseeing, or assessing compliance with ICWA. Retaining all of the 2016 final rule ICWA-related data elements would put HHS in the position of interpreting various ICWA requirements. We have authority only for the collection of data elements that are used for functions and oversight under HHS authority, namely the title IV–B and IV–E programs.

Second, we want to clarify that section 422(b)(9) of the Act does not provide the legal authority for HHS to collect ICWA-related data in AFCARS or for HHS to determine state compliance with ICWA. Rather, it simply requires a description of specific measures taken by the state to comply with ICWA. HHS is not authorized to determine compliance with ICWA and/or penalize states for failure to comply with ICWA through this requirement.

Third, sections 479(c)(3)(A) through (D) of the Act require the collection of comprehensive national information with respect to the demographic characteristics of, status of, and assistance provided to children in foster care and those who are adopted with state involvement along with their biological, foster, and adoptive parents. The AFCARS statute does not provide authority for ACF to require states to report specific details on ICWA's requirements in AFCARS to be used for ICWA compliance and this was mischaracterized in the 2016 final rule. The AFCARS authority allows us to

collect ICWA-related data elements in this final rule to inform us whether a child's connections with his or her family, heritage, and community are preserved and will provide context for other title IV–B and IV–E monitoring. Further, the data will provide supplemental information on whether states follow certain best practices with regard to Native American children in foster care. For example, while HHS reviews are not designed to measure states' conformity with specific ICWA provisions, information from the data elements in this final rule will provide contextual data such as whether the state made concerted efforts to preserve a child's connections to the child's tribe and how well the state engages in consultation with tribal representatives.

Lastly, in the 2019 NPRM preamble (84 FR 16578), we reported that we will not release specific information regarding a child's tribal membership or ICWA applicability to requestors, except for the Indian tribe of which the child is or may be a member, due to the low numbers of children in the out-of-home care reporting population where ICWA applies in order to protect the confidentiality of these children. This means that the 2016 final rule ICWA-related data elements would not be available for ICWA compliance purposes because ACF is unable to release information to other entities that could use it for this purpose.

Response to Comments on Removing the Sexual Orientation Data Elements

We did not propose data elements on the sexual orientation of children and their foster or adoptive parents and legal guardians in the 2019 NPRM, nor are we including them in this final rule. However, we would like to respond to the comments received.

Comment: Numerous private individuals, national advocacy organizations and other commenters suggested that we add the data elements requiring agencies to report the sexual orientation of children and their foster or adoptive parents and legal guardians in the final rule. The common reasons provided, which were the same or similar reasons provided by these commenters in response to the 2018 ANPRM, are that the data would (1) enhance recruitment of foster homes; (2) aid permanency and case decision-making; (3) promote visibility for marginalized groups; (4) help to analyze youth outcomes; (5) address disparities; and (6) enable Congress to legislate appropriately at the national-level. Some of the national advocacy organizations provided information about a set of professional guidelines developed in 2013 to address the need to collect sexual orientation information for such purposes as developing case plans and tracking individual case outcomes in support of their recommendation. However, state and local child welfare agency commenters generally acknowledged that information about a youth's or provider's sexual orientation can be collected as part of the title IV–E agency's casework and should be documented in the case file, if it pertains to the circumstances of the child, and reporting it to a national database would not enhance their work with children and families.

Response: For the reasons set forth in the 2019 NPRM, we continue to disagree with the commenters that suggested this final rule should include this sexual orientation data and have made no changes. We have examined the 2013 professional guidelines which largely provide best practice guidelines related to *client/caseworker/agency interaction* in gathering and managing sexual orientation and gender identity (SOGI) information *from clients.* They are a practice guide, or set of professional standards, for *child welfare staff and child welfare agencies* on how they interact with clients, and gather and manage SOGI information at the case, local, and state level. We conclude that those guidelines are not relevant to collecting sexual orientation information through a Federal administrative data collection. We continue to rely on the 2016 Office of Management and Budget (OMB) guidance to ground our decision making because it provides direction for Federal agencies to consider before requiring SOGI information in surveys and administrative databases (84 FR 16576).

Section 1355.40 Foster Care and Adoption Data Collection

In this final rule, we modify the dates in § 1355.40 to require title IV–E agencies to submit AFCARS data in accordance with AFCARS regulations at § 1355.40 and the appendices to part 1355 until the dates listed in the **DATES** section of this rule. This means that title IV–E agencies must continue to report AFCARS data in the same manner they do currently until the implementation date of this final rule, which is October 1, 2022 (Fiscal Year (FY) 2023). We did not propose these changes in the 2019 NPRM, however these are technical conforming edits needed to implement this final rule.

Section 1355.41 Scope of the Adoption and Foster Care Analysis and Reporting System

This section sets forth the scope of AFCARS. In the 2019 NPRM, we proposed to make technical amendments to paragraph (c) to update citations. However, in this final rule, we make a technical revision to remove paragraph (c) which prescribed definitions, specifically citing to the ICWA statute and DOI regulations. We make this edit based on the comments we received as we described and responded to above, as we are concerned we may have unintentionally created misperceptions related to our authority over ICWA compliance. Accordingly, we are removing specific definitions because they relate to ICWA requirements and could create confusion for AFCARS reporting. Instead, in the description of the data element itself, we indicate if there is an applicable ICWA citation for reporting on a data element.

Section 1355.43 Data Reporting Requirements

This section contains the AFCARS data reporting requirements. In the 2019 NPRM, we proposed to amend paragraph (b)(3), which required that the title IV–E agency must report the date of removal, exit date, and exit reason for each child who had an out-of-home care episode prior to October 1, 2020. This means that title IV–E agencies do not need to report complete historical and current information for these children. We did not receive comments relevant to our proposal for this section. In this final rule, we change the date to October 1, 2022, to conform to the implementation date in the **DATES** section of this final rule.

Section 1355.44 Out-of-Home Care Data File Elements

This section includes all of the data element descriptions for the out-of-home care data file.

Section 1355.44(a) General Information

In the 2019 NPRM, we proposed in paragraph (a) that the title IV–E agency must collect and report general information that identifies the reporting title IV–E agency as well as the child in out-of-home care. We did not receive comments relevant to the data elements proposed in § 1355.44(a), thus we finalize paragraph (a) as proposed:

Title IV–E agency. Under paragraph (a)(1), the title IV–E agency must indicate the name of the title IV–E agency responsible for submitting AFCARS data to ACF. A state title IV–

E agency must indicate its state name. ACF will work with tribal title IV–E agencies to provide guidance during implementation.

Report date. Under paragraph (a)(2), the title IV–E agency must indicate the report period date, which is the last month and year that corresponds with the end of the report period.

Local agency. Under paragraph (a)(3), the title IV–E agency must report the name of the local county, jurisdiction, or equivalent unit that has responsibility for the child. ACF will work with tribal title IV–E agencies to provide guidance during implementation.

Child record number. Under paragraph (a)(4), the title IV–E agency must report the child's record number, which is a unique person identification number, as an encrypted number as instructed.

Section 1355.44(b) Child Information

In the 2019 NPRM, we proposed in paragraph (b) that the title IV–E agency must report certain child-specific information for the identified child in out-of-home care. Below are the finalized data elements and a discussion of whether we received comments on each data element.

Child's date of birth. In the 2019 NPRM, we proposed in paragraph (b)(1) that the title IV–E agency must report the child's date of birth including the month, day, and year, as instructed. We did not receive comments relevant to our proposal for this paragraph, thus we finalize this data element as proposed.

Child's sex. In the 2019 NPRM, we proposed in paragraph (b)(2) that the title IV–E agency must report the child's sex from the response options of ''male'' and ''female''.

Comment: Two states suggested that we include a third gender option, such as ''other'', because other agencies within the state have this ability (*e.g.,* motor vehicles), so it promotes consistency. Sixteen national advocacy organizations suggested we add data elements on gender identity.

Response: We do not adopt changes based on public comments to this data element nor do we provide additional response options in this final rule because we did not receive a significant number of comments from title IV–E agencies requesting changes. Further, we have no compelling reason to increase the agency's burden to require this information be reported to AFCARS as we have no need for it at the Federal level.

Reason to know a child is an ''Indian Child'' as defined in the Indian Child Welfare Act. In the 2019 NPRM, we proposed in paragraph (b)(3) that the state title IV–E agency must report whether it made inquiries to determine if the child is an Indian child as defined in the Indian Child Welfare Act of 1978 (ICWA) by indicating ''yes'' or ''no''. We did not receive comments specific to this data element, and finalize this data element as proposed.

Child's tribal membership. In the 2019 NPRM, we proposed in paragraph (b)(4) that the state title IV–E agency must report whether the child is a member of, or eligible for membership in, a federally recognized Indian tribe from the response options of ''yes,'' ''no'', or ''unknown''. If the state title IV–E agency indicated ''yes'', it would have to indicate all federally recognized Indian tribe(s) that may potentially be the Indian child's tribe(s) in a format according to ACF's specifications. We did not receive comments specific to these data elements. We finalize these data elements as proposed, with a conforming change to paragraph (b)(4)(i) to specify a ''federally recognized'' Indian tribe, consistent with the language used in paragraph (b)(4)(ii).

Application of ICWA. In the 2019 NPRM, we proposed in paragraph (b)(5) that the state title IV–E agency must report whether ICWA applies for the child from the response options of ''yes,'' ''no'', or ''unknown''. If the state title IV–E agency indicated ''yes'', it would be required to indicate the date that the Indian tribe or state or tribal court notified the state title IV–E agency that ICWA applies. We did not receive comments specific to this data element, and finalize this data element as proposed.

Notification. In the 2019 NPRM, we proposed in paragraph (b)(6) that the state title IV–E agency must report whether the child's Indian tribe was sent legal notice, if the state title IV–E agency indicated ''yes'' in the data element established in paragraph (b)(5)(i).

Comment: Commenters who opposed streamlining the data elements we proposed in the 2019 NPRM requested that we add data elements for reporting whether the state sent notice to the parent and Indian custodian and the date of the notice.

Response: As we explained earlier in the section-by-section discussion, we did not make revisions to the proposal because we are moving forward with requiring a streamlined set of data elements from states for identifying the number of children in out-of-home care nationally who should be afforded the protections of ICWA and we do not need more details in federally reported AFCARS data related to ICWA notifications. We finalize this data element as proposed.

Child's race. In the 2019 NPRM, we proposed in paragraph (b)(7) that the title IV–E agency must report the race of the child. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Child's Hispanic or Latino ethnicity. In the 2019 NPRM, we proposed in paragraph (b)(8) that the title IV–E agency must report the Hispanic or Latino ethnicity of the child. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Health assessment. In the 2019 NPRM, we proposed in paragraph (b)(9) that the title IV–E agency must report whether the child had a health assessment during the current out-of-home care episode from the response options of ''yes'' or ''no''.

Comment: Several states expressed support for streamlining this data element because they agreed that any further detail regarding health assessments should be part of a qualitative review. Eighteen national advocacy groups opposed the proposal to streamline reporting on health assessments, stating that more details on the dates of health assessments and whether they were timely are needed to provide insight into the health of children in foster care.

Response: We did not make changes to include more details about the health assessment because we did not receive additional evidence to support the need for this data at a Federal level. Furthermore, we do not need additional details on health assessments reported to AFCARS to monitor compliance with section 422(b)(15)(A) of the Act. We finalize this data element as proposed.

Health, behavioral or mental health conditions. In the 2019 NPRM, we proposed in paragraph (b)(10) that the title IV–E agency must report whether the child was diagnosed by a qualified professional as having one or more health, behavioral, or mental health conditions from a list of eleven conditions prior to or during the child's current out-of-home care episode. If so, the agency must report whether it is an existing condition or a previous condition, and additional information as instructed on whether the child had an exam or assessment.

Comment: Six states and local agencies recommended streamlining this data element further, by either reducing the response options or reducing the health, behavioral, or mental health conditions.

Response: We did not make changes to this data element in response to comments because further streamlining will render the information not useful for informing the annual outcomes report to Congress. Additionally, the conditions are based on a combination of the Diagnostic and Statistical Manual of Mental Disorders and definitions from the National Institutes of Health, and the suggestion to further streamline by combining conditions was not overwhelmingly supported by commenters. We finalize this data element as proposed.

School enrollment. In the 2019 NPRM, we proposed in paragraph (b)(11) that the title IV–E agency must report whether or not the child is enrolled as a full-time student in elementary or secondary education, or is a full or part-time student enrolled in post-secondary education or training, or college.

Comment: Four states suggested removing this data element believing it is duplicative of paragraph (b)(12) *Educational level.*

Response: We retained this data element as proposed because we are specifically seeking information on school enrollment *and* the highest educational level a child has completed. We will use the combined information to assess, on a national basis, the well-being of children placed in out-of-home care as part of monitoring the title IV–B and IV–E programs through reviews. We finalize this data element as proposed.

Educational level. In the 2019 NPRM, we proposed in paragraph (b)(12) that the title IV–E agency must report the highest educational level from kindergarten to college or post-secondary education/training, as well as a general equivalency diploma (GED), completed by the child as of the last day of the report period.

Comment: One state asked for clarification as to when the child's highest educational level must be reported.

Response: The title IV–E agency must report the highest educational level the child completed as of the last day of the report period. We finalize this data element as proposed.

Pregnant or parenting. In the 2019 NPRM, we proposed in paragraph (b)(13)(i) that the title IV–E agency must report whether the child is pregnant as of the end of the report period from the response options of ''yes'' or ''no''. In the 2019 NPRM, we proposed in paragraph (b)(13)(ii) that the title IV–E agency must indicate whether the child has ever fathered or bore a child by indicating from the response options of ''yes'' or ''no''. In the 2019 NPRM, we proposed in paragraph (b)(13)(iii) that the title IV–E agency must indicate whether the child and his/her child(ren) are placed together at any point during the report period, if the response in paragraph (b)(13)(ii) of this section is ''yes''. We did not receive substantive comments relevant to our proposal for this paragraph and we finalize these data elements as proposed.

Special education. In the 2019 NPRM, we proposed in paragraph (b)(14) that the title IV–E agency must report on the child's special education status by indicating if the child has an Individualized Education Program (IEP) or an Individualized Family Service Plan (IFSP). We did not receive substantive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Prior adoption. In the 2019 NPRM, we proposed in paragraph (b)(15) that the title IV–E agency must report whether the child experienced a prior legal adoption, prior to the current out-of-home care episode. If the title IV–E agency indicates ''yes'', then the title IV–E agency must report the month and year of the most recent prior finalized adoption (in paragraph (b)(15)(i)) and whether the child's most recent prior adoption was an intercountry adoption (in paragraph (b)(15)(ii)).

Comment: Two states commented that reporting this information is discretionary and recommended we remove these data elements.

Response: We did not make changes based on comments because reporting on prior adoptions and intercountry adoptions is required by sections 479(c)(3)(C)(ii) and 479(d) of the Act. Currently, the information is reported via a narrative in the Child and Family Services Plan (CFSP) and annual updates. Quantitative reporting through AFCARS is preferred because the accuracy, reliability, and consistency of the data will improve. We finalize these data elements as proposed.

Prior guardianship. In the 2019 NPRM, we proposed in paragraph (b)(16)(i) that the title IV–E agency must report whether the child experienced any prior public, private or independent guardianship(s). If so, the title IV–E agency must report the month and year of the most recent prior finalized legal guardianship (in paragraph (b)(16)(ii)).

Comment: Three states commented that reporting on this information is discretionary and recommended these data elements be removed.

Response: We did not make changes to remove these data elements because reporting on prior guardianships is required by section 479(d) of the Act. We finalize these data elements as proposed.

Child financial and medical assistance. In the 2019 NPRM, we proposed in paragraph (b)(17) that the title IV–E agency must report whether the child received financial and medical assistance, other than title IV–E foster care maintenance payments, from a list of eight sources. We did not receive substantive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Title IV–E foster care during report period. In the 2019 NPRM, we proposed in paragraph (b)(18) that the title IV–E agency must report whether a title IV–E foster care maintenance payment was paid on behalf of the child at any point during the report period from the response options of ''yes'' or ''no''. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Siblings. In the 2019 NPRM, we proposed in paragraphs (b)(19) through (21) that the title IV–E agency must report the number of siblings that the child has, the number of siblings who are in foster care and the number of siblings who are in the same living arrangement as the child, on the last day of the report period.

Comment: Two states suggested modifications to the sibling data elements to require agencies to report if siblings were living together at any time during the six-month report period and on the last day of the reporting period, and to not ask for numbers of siblings.

Response: We did not make changes based on the comments because these data elements as were proposed in the 2019 NPRM will meet our needs for monitoring the title IV–B and IV–E programs better than the states' proposal because they suggested to provide limited information on siblings of children in foster care and only whether siblings lived together during a report period. Their suggestion is not robust enough for us to understand the entire situation of a child in foster care and the child's siblings. We finalize these data elements as proposed.

Section 1355.44(c) Parent or Legal Guardian Information

In the 2019 NPRM, we proposed in paragraph (c) that the title IV–E agency must report certain information on the child's parent(s) or legal guardian(s). Below are the finalized data elements and a discussion of whether we received comments on each data element.

Year of birth of parent(s) or legal guardian(s). In the 2019 NPRM, we proposed in paragraphs (c)(1) and (2) that the title IV–E agency must report

the birth year of the child's parent(s) or legal guardian(s). We did not receive comments relevant to our proposal for this paragraph and we finalize these data elements as proposed.

Tribal membership mother and father. In the 2019 NPRM, we proposed in paragraphs (c)(3) and (4) that the state title IV–E agency must report whether the biological or adoptive mother and father are members of an Indian tribe, if known. We did not receive comments specific to this data element and we finalize these data elements as proposed.

Termination/modification of parental rights. In the 2019 NPRM, we proposed in paragraph (c)(5) that the title IV–E agency must report whether the rights for each parent were terminated or modified on a voluntary or involuntary basis. In the 2019 NPRM, we proposed in paragraph (c)(5)(i) that the title IV–E agency must report each date a petition to terminate/modify parental rights was filed, if applicable. In the 2019 NPRM, we proposed in paragraph (c)(5)(ii) that the title IV–E agency must report the date parental rights were terminated/modified, if applicable.

Comment: One local agency asked how to report the information in paragraph (c)(5)(i) if a petition is not filed because the parent voluntarily relinquished the rights without a court order.

Response: The agency would report this to be a voluntary termination of parental rights and leave paragraph (c)(5)(i) blank as we instruct to only complete that paragraph ''if applicable''. However, to make this clearer, we modified the regulation to add an instruction in paragraph (c)(5)(i) that if a petition has not been filed, to leave the paragraph (c)(5)(i) data element blank. We finalize the data elements in paragraphs (c)(5)(ii) and (iii) as proposed.

Section 1355.44(d) Removal Information

In the 2019 NPRM, we proposed in paragraph (d) that the title IV–E agency must report information on each of the child's removal(s). Below are the finalized data elements and a discussion of whether we received comments on each data element.

Date of child's removal. In the 2019 NPRM, we proposed in paragraph (d)(1) that the title IV–E agency must report the date(s) on which the child was removed for each removal of a child who enters the placement and care responsibility of the title IV–E agency as instructed. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Removal transaction date. In the 2019 NPRM, we proposed in paragraph (d)(2) that the title IV–E agency must report the transaction date for each of the child's removal dates reported in paragraph (d)(1) using a non-modifiable, computer-generated date which accurately indicates the month, day, and year each response to paragraph (d)(1) was entered into the information system. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Environment at removal. In the 2019 NPRM, we proposed paragraph (d)(3) that the title IV–E agency must report the type of environment (household or facility) from a list of seven that the child was living in at the time of each of the child's removals reported in paragraph (d)(1). We did not receive substantive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Child and family circumstances at removal. In the 2019 NPRM, we proposed in paragraph (d)(4) that the title IV–E agency must report on all of the circumstances surrounding the child and family at the time of each removal reported in paragraph (d)(1) from a list of 34 circumstances.

Comment: Two states and one local agency made suggestions to modify paragraph (d)(4) such as combining certain circumstances and rearranging the circumstances into ones that are ''reasons'' for removal and circumstances that ''existed'' at the time of removal.

Response: We did not make changes based on the comments because the data element as proposed in the 2019 NPRM will meet our needs, better than the states' proposal, for monitoring, and reporting on, the title IV–B and IV–E programs, and no concerns were raised by the vast majority of title IV–E agency commenters in response to the 2019 NPRM. Additionally, title IV–E agencies are required to report the full set of circumstances that surround the child at the time of removal and not just the ''reason'' for a child's removal, because, in almost every case, there is not only one reason for the child's removal. This has been an AFCARS requirement since 1993, described currently as ''Actions or Conditions Associated With Child's Removal''. Additionally, the circumstances in this data element inform program monitoring and budgeting, such as knowing nationally the number of children whose removal was impacted by a caretaker's substance abuse. For these reasons, we finalize these data elements as proposed.

Victim of sex trafficking prior to entering foster care. In the 2019 NPRM, we proposed in paragraph (d)(5) that the title IV–E agency must report whether the child had been a victim of sex trafficking before the current out-of-home care episode and if yes, the agency must indicate whether it reported each instance to law enforcement and the dates of each report. We did not receive substantive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Victim of sex trafficking while in foster care. In the 2019 NPRM, we proposed in paragraph (d)(6) that the title IV–E agency must report whether the child was a victim of sex trafficking while in out-of-home care during the current episode and if yes, the agency must indicate whether it reported each instance to law enforcement and the dates of each report. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Section 1355.44(e) Living Arrangement and Provider Information

In the 2019 NPRM, we proposed in paragraph (e) that the title IV–E agency must report information on each of the child's living arrangements for each out-of-home care episode. Below are the finalized data elements and a discussion of whether we received comments on each data element.

Date of living arrangement. In the 2019 NPRM, we proposed in paragraph (e)(1) that the title IV–E agency must report the date of each living arrangement. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Foster family home. In the 2019 NPRM, we proposed in paragraph (e)(2) that the title IV–E agency must report whether or not a child resides in a foster family home for each living arrangement, and if yes, the agency must complete paragraph (e)(3). We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Foster family home type. In the 2019 NPRM, we proposed in paragraph (e)(3) that the title IV–E agency must report the type of foster family home from a list of six. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Other living arrangement type. In the 2019 NPRM, we proposed in paragraph (e)(4) that the title IV–E agency must

report whether a child who is not placed in a foster family home is placed in one of 14 mutually exclusive living arrangements.

Comment: A national advocacy organization suggested adding ''skilled nursing facility'' as a living arrangement.

Response: We did not make changes to add another living arrangement as suggested because the living arrangements proposed cover the range of placement types necessary for our purposes and we do not need any additional level of detail. We finalize this data element as proposed.

Location of living arrangement. In the 2019 NPRM, we proposed in paragraph (e)(5) that the title IV–E agency must report whether the location of each of the child's living arrangement is within or outside of the reporting state or tribal service area or is outside of the country. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Jurisdiction or country where child is living. In the 2019 NPRM, we proposed in paragraph (e)(6) that the title IV–E agency must report the jurisdiction or country where the child is living if it is outside of the reporting state or tribal service area or is outside of the country. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Marital status of the foster parent(s). In the 2019 NPRM, we proposed in paragraph (e)(7) that the title IV–E agency must report the marital status of the foster parent(s). We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Child's relationship to the foster parent(s). In the 2019 NPRM, we proposed in paragraph (e)(8) that the title IV–E agency must report the child's relationship to the foster parent(s) from the following three response options: ''relative(s)'', ''nonrelative(s)'', and ''kin''. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Year of birth for foster parent(s). In the 2019 NPRM, we proposed in paragraphs (e)(9) and (14) that the title IV–E agency must report the year of birth of the foster parent(s). We did not receive comments relevant to our proposal for these paragraphs and we finalize these data elements as proposed.

Foster parent(s) tribal membership. In the 2019 NPRM, we proposed in paragraphs (e)(10) and (15) that the title IV–E agency must report the tribal membership of the foster parent(s). We did not receive comments specific to these data elements and we finalize these data elements as proposed.

Race of foster parent(s). In the 2019 NPRM, we proposed in paragraphs (e)(11) and (16) that the title IV–E agency must report the race of the foster parent(s). We did not receive comments relevant to our proposal for these paragraphs and we finalize these data elements as proposed.

Hispanic or Latino ethnicity of foster parent(s). In the 2019 NPRM, we proposed in paragraphs (e)(12) and (17) that the title IV–E agency must report the Hispanic or Latino ethnicity of the foster parent(s), as appropriate. We did not receive comments relevant to our proposal for this paragraph and we finalize these data elements as proposed.

Sex of foster parent(s). In the 2019 NPRM, we proposed in paragraphs (e)(13) and (18) that the title IV–E agency must report the sex of the foster parent(s).

Comment: Two states suggested that we include a third gender option, such as ''other'', because other agencies within the state have this ability (*e.g.,* motor vehicles), so it promotes consistency. Sixteen national advocacy organizations suggested we add data elements on gender identity.

Response: We did not make changes to this data element and did not add data elements because we did not receive a significant enough number of comments from title IV–E agencies that identified reasons to revise the response options to include a third gender response option. Further, we have no compelling reason to increase the agency's burden to require this information be included in AFCARS as we have no need for it at the Federal level. We finalize these data elements as proposed.

Section 1355.44(f) Permanency Planning

In the 2019 NPRM, we proposed in paragraph (f) that the title IV–E agency must report information related to permanency planning for children in out-of-home care, which includes permanency plans, hearings, and caseworker visits with the child. Below are the finalized data elements and a discussion of whether we received comments on each data element.

Permanency plan and date. In the 2019 NPRM, we proposed in paragraphs (f)(1) and (2) that the title IV–E agency must report each permanency plan established for the child. We did not receive comments relevant to our proposal for these paragraphs and we finalize these data elements as proposed.

Date of periodic review(s) and permanency hearing(s). In the 2019 NPRM, we proposed in paragraph (f)(3) that the title IV–E agency must report the date of each periodic review. In the 2019 NPRM, we proposed in paragraph (f)(4) that the title IV–E agency must report the date of each permanency hearing. We did not receive comments relevant to our proposal for these paragraphs and we finalize these data elements as proposed.

Caseworker visit dates and locations. In the 2019 NPRM, paragraph (f)(5) that the title IV–E agency must report the date of each in-person, face-to-face caseworker visit with the child. In the 2019 NPRM, we proposed in paragraph (f)(6) that the title IV–E agency must report each caseworker visit location from two response options.

Comment: Two states and one local agency suggested that caseworker visit information is better suited for a qualitative review and should not be reported in AFCARS.

Response: We continue to believe that reporting caseworker visit information in AFCARS instead of the CFSP will improve the accuracy of the data and alleviate the burden of agencies having to report on this as a narrative in the CFSP and annual updates. Thus, we finalize these data elements as proposed.

Section 1355.44(g) General Exit Information

In the 2019 NPRM, we proposed in paragraph (g) that the title IV–E agency must report exit information for each out-of-home care episode when the title IV–E agency's placement and care responsibility for the child ends. We did not receive comments on our proposal for section 1355.44(g), thus we finalize paragraph (g) as proposed.

Date of exit. Under paragraph (g)(1), the title IV–E agency must report the date for each of the child's exits from out-of-home care.

Exit transaction date. Under paragraph (g)(2), the title IV–E agency must report a non-modifiable, computer-generated date which accurately indicates the date of each response to paragraph (g)(1) of this section.

Exit reason. Under paragraph (g)(3), the title IV–E agency must report the reason for each of the child's exits from out-of-home care from nine response options.

Transfer to another agency. Under paragraph (g)(4), the title IV–E agency must report the type of agency that

received placement and care responsibility for the child if the title IV–E agency indicated the child was transferred to another agency in paragraph (g)(3) from seven response options.

Section 1355.44(h) Exit to Adoption and Guardianship Information

In the 2019 NPRM, we proposed in paragraph (h) that the title IV–E agency must report certain information only if the title IV–E agency indicated the child exited to adoption or legal guardianship in paragraph (g)(3) *Exit reason.* Otherwise, the title IV–E agency must leave paragraph (h) blank. Below are the finalized data elements and a discussion of whether we received comments on each data element.

Marital status of the adoptive parent(s) or guardian(s). In the 2019 NPRM, we proposed in paragraph (h)(1) that the title IV–E agency must report the marital status of the adoptive parent(s) or legal guardian(s). We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Child's relationship to the adoptive parent(s) or guardian(s). In the 2019 NPRM, we proposed in paragraph (h)(2) that the title IV–E agency must report the type of relationship between the child and the adoptive parent(s) or legal guardian(s) from four response options. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Date of birth of the adoptive parent or guardian. In the 2019 NPRM, we proposed in paragraphs (h)(3) and (8), the title IV–E agency must report the date of the birth of the adoptive parent(s) or legal guardian(s). We did not receive comments relevant to our proposal for these paragraphs and we finalize these data elements as proposed.

Adoptive parent or guardian tribal membership. In the 2019 NPRM, we proposed in paragraphs (h)(4) and (9) that the title IV–E agency must report whether the adoptive parent(s) or legal guardian(s) is a member of an Indian tribe as instructed. We did not receive comments specific to these paragraphs and we finalize these data elements as proposed.

Race of adoptive parent or guardian. In the 2019 NPRM, we proposed in paragraphs (h)(5) and (10) that the title IV–E agency must report the adoptive parent(s) or legal guardian(s) race as instructed. We did not receive comments relevant to our proposal for these paragraphs and we finalize these data elements as proposed.

Hispanic or Latino ethnicity of adoptive parent or guardian. In the 2019 NPRM, we proposed in paragraphs (h)(6) and (11) that the title IV–E agency must report whether the adoptive parent(s) or legal guardian(s) is of Hispanic or Latino ethnicity as instructed. We did not receive comments relevant to our proposal for these paragraphs and we finalize these data elements as proposed.

Sex of adoptive parent or guardian. In the 2019 NPRM, we proposed in paragraphs (h)(7) and (12) that the title IV–E agency must report the sex of the adoptive parent(s) or legal guardian(s) as instructed.

Comment: Two states suggested that we include a third gender option, such as ''other'', because other agencies within the state have this ability (*e.g.,* motor vehicles), so it promotes consistency. Sixteen national advocacy organizations suggested we add data elements on gender identity.

Response: We did not make changes to this data element and did not add data elements because we did not receive a significant enough number of comments from title IV–E agencies that identified reasons to revise the response options to include a third gender response option. Further, we have no compelling reason to increase the agency's burden to require this information be included in AFCARS as we have no need for it at the Federal level. Accordingly, we finalize these data elements as proposed.

Inter/Intrajurisdictional adoption or guardianship. In the 2019 NPRM, we proposed in paragraph (h)(13) that the title IV–E agency must report whether the child was placed within the state or tribal service area, outside of the state or tribal service area or into another country for adoption or legal guardianship. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Assistance agreement type. In the 2019 NPRM, we proposed in paragraph (h)(14) that the title IV–E agency must report the type of assistance agreement between the title IV–E agency and the adoptive parent(s) or legal guardian(s) as appropriate. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Siblings in adoptive or guardianship home. In the 2019 NPRM, we proposed in paragraph (h)(15) that the title IV–E agency must report the number of siblings of the child who are in the same adoptive or legal guardianship home as the child. We did not receive comments relevant to our proposal for this paragraph and we finalize this data element as proposed.

Section 1355.45 Adoption and Guardianship Assistance Data File Elements

This section contains the data elements for the adoption and guardianship assistance data file. We proposed in the 2019 NPRM conforming amendments only to paragraphs (b)(2) and (3) and (f). We did not receive comments on § 1355.45 and we finalize these data elements as proposed.

Child's sex. Under paragraph (b)(2), the title IV–E agency must report the sex of the child.

Child's race. Under paragraph (b)(3)(vi), for *Race-unknown,* we made edits to match edits in § 1355.44(b)(7)(vi), where we clarify the instructions for reporting the race of the child.

Adoption or guardianship placing agency. Under paragraph (f), the title IV–E agency must indicate the agency that placed the child for adoption or legal guardianship from three options.

Section 1355.46 Compliance

This section lists compliance requirements for AFCARS data including the type of assessments ACF will conduct to determine the accuracy of a title IV–E agency's data, the data that is subject to these assessments, the compliance standards, and the manner in which a title IV–E agency that is initially determined to be out of compliance can correct its data. In the 2019 NPRM, we proposed conforming amendments only to paragraph (c)(2) to update the cross references. We did not receive substantive comments relevant to our proposal for this paragraph and we finalize this paragraph as proposed.

VI. Regulatory Impact Analysis

Executive Orders 12866, 13563, and 13771

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). E.O. 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. ACF consulted with OMB, which determined that this rule does meet the criteria for a significant regulatory action under E.O. 12866. Thus, it was subject to OMB review.

ACF determined that the costs to title IV–E agencies as a result of this rule will not be economically significant as defined in E.O. 12866 (have an annual effect on the economy of $100 million or more 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, or tribal governments or communities). Because the rule is not economically significant as defined in E.O. 12866, a full cost-benefit analysis per OMB Circular A–4 does not need to be included in this rule. An abbreviated costs and benefits analysis is below.

Costs and Benefits

AFCARS is the only comprehensive case-level data set on the incidence and experiences of children who are in out-of-home care under the placement and care of the title IV–E agency or who are under a title IV–E adoption or guardianship assistance agreement. A regulated national data set on these children is required by section 479(c)(3) of the Act. Section 479(c)(1) of the Act requires that any data collection system developed and implemented under this section must avoid unnecessary diversion of resources from agencies. Section 479(c)(2) of the Act requires that data collected is reliable and consistent over time. This final rule streamlines the information required in the 2016 final rule for title IV–E agencies to report to AFCARS, which will avoid the unnecessary diversion of resources. We removed data elements that 2018 ANPRM and 2019 NPRM commenters identified would not meet the requirements for reliability and consistency, thus are ineffective at providing a national picture of children placed in out-of-home care. Not publishing this final rule, and in effect requiring title IV–E agencies to implement the vast requirements of the 2016 final rule, would not meet these statutory requirements, as demonstrated by the commenters that supported streamlining.

Federal reimbursement under title IV–E will be available for a portion of the costs that title IV–E agencies will incur as a result of the revisions in this final rule, depending on each title IV–E agency's cost allocation plan, information system, and other factors. Estimated burden and costs to the Federal Government are provided below in the Burden estimate section. We estimate the Federal portion of the overall information collection burden to be $43,093,725. Additional costs to the Federal Government to design a system to collect the new AFCARS data are expected to be minimal.

Alternatives Considered

ACF considered not streamlining the data elements, meaning that the 2016 final rule would go into effect. This would not be in line with the findings of the HHS Regulatory Reform Taskforce or the overwhelming majority of state and local agencies that supported streamlining the data elements as proposed in the 2019 NPRM.

Executive Order 13771, entitled Reducing Regulation and Controlling Regulatory Costs (82 FR 9339), was issued on January 30, 2017. Annualizing these costs and cost savings in perpetuity and discounting at 7 percent back to 2016, we estimate that this rule would generate $26.7 million in annualized cost savings discounted relative to 2016 at 7 percent over a perpetual time horizon, in 2016 dollars. Details on the estimated costs of this rule can be found in the Paperwork Reduction Act analysis. This rule is considered an E.O. 13771 deregulatory action. As described below, this rule will save approximately 588,094 burden hours over the 2016 final rule. After multiplying the burden hours by the average wage rate of affected individuals, this amounts to $42,930,862 in savings each year, relative to the estimated costs and burden of the 2016 final rule, in the year this final rule will become effective, which is in FY 2023. As a result, we estimate that this rule generates $26.7 million in annualized cost savings in 2016 dollars, discounted at 7 percent over a perpetual time horizon relative to year 2016.

Regulatory Flexibility Analysis

The Secretary certifies, under 5 U.S.C. 605(b), as enacted by the Regulatory Flexibility Act (Pub. L. 96–354), that this rule will not result in a significant impact on a substantial number of small entities. This rule does not affect small entities because it is applicable only to state and tribal title IV–E agencies, and those entities are not considered to be small entities for purposes of the Regulatory Flexibility Act.

Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act (Pub. L. 104–4) requires agencies to prepare an assessment of anticipated costs and benefits before finalizing any rule that may result in an annual expenditure by state, local, and tribal governments, in the aggregate, or by the private sector, of $100 million or more (adjusted annually for inflation). In 2019, that threshold is approximately $154 million. This rule does not impose any mandates on state, local, or tribal governments, or the private sector that will result in an annual expenditure of $150 million or more.

Congressional Review

This regulation is not a major rule as defined in 5 U.S.C. 8.

Assessment of Federal Regulations and Policies on Families

Section 654 of the Treasury and General Government Appropriations Act of 2000 (Pub. L. 106–58) requires Federal agencies to determine whether a policy or regulation may affect family well-being. If the agency's determination is affirmative, then the agency must prepare an impact assessment addressing seven criteria specified in the law. This rule will not have an impact on family well-being as defined in the law.

Executive Order 13132 on Federalism

E.O. 13132 requires that Federal agencies consult with state and local government officials in the development of regulatory policies with federalism implications. Consistent with E.O. 13132 and *Guidance for Implementing E.O. 13132* issued on October 28, 1999, the Department must include in ''a separately identified portion of the preamble to the regulation'' a ''federalism summary impact statement'' (Secs. 6(b)(2)(B) & (c)(2)). The Department's federalism summary impact statement is as follows—

- ''A description of the extent of the agency's prior consultation with state and local officials''—The public comment period for the 2019 NPRM was open for 60 days and closed on June 18, 2019. During this time, we solicited comments via *regulations.gov* and email. During this comment period, we held three informational calls on April 30, May 2, and 28, 2019 for states, Indian tribes, and the public. During these calls, we provided an overview of the 2019 NPRM provisions and where to submit comments. Prior to issuing the 2019 NPRM, we solicited comments via an ANPRM in 2018.
- ''A summary of the nature of their concerns and the agency's position supporting the need to issue the regulation''—As we discussed in section III of the preamble to this final rule, state commenters supported the revisions proposed in the 2019 NPRM to streamline the AFCARS regulation because they believe it would reduce the burden of reporting on title IV–E agencies and that the proposal kept the data elements that are essential to understanding nationally the population

of children in foster care. We continue to believe that, in order to reduce the burden on title IV–E agencies, which are required to submit the AFCARS data to ACF and will be held to penalties for non-compliant data submissions, we must finalize the proposed revisions to AFCARS in this rule.

• ''A statement of the extent to which the concerns of state and local officials have been met'' (Secs. 6(b)(2)(B) and 6(c)(2))—As we discussed in section III of the preamble to this final rule, this rule finalizes the 2019 NPRM proposal for fewer data elements than is in the 2016 final rule. We believe that the states sufficiently argued in both their comments to the 2018 ANPRM and the 2019 NPRM that the 2016 final rule had many data elements that can be streamlined while still providing critical information on the reporting population.

Paperwork Reduction Act

This final rule contains information collection requirements (ICRs) that are subject to review by the OMB under the Paperwork Reduction Act of 1995 (PRA), 44 U.S.C. 3501–3520. A description of these provisions is given in the following paragraphs with an estimate of the annual burden. In the PRA section for the 2019 NPRM on whether an information collection should be approved by OMB, the Department solicited comment on the following issues:

• The need for the information collection and its usefulness in carrying out the proper functions of our agency.

• The accuracy of our estimate of the information collection burden in the 2019 NPRM.

• 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.

OMB did not receive comments in response to the 2019 NPRM PRA.

The information collection for AFCARS is currently authorized under OMB number 0970–0422. This rule contains information collection requirements in § 1355.44, the out-of-home care data file, and § 1355.45, the adoption and guardianship assistance data file, that the Department submitted to OMB for its review. Pursuant to this final rule:

• State and tribal title IV–E agencies must report information on children who are in the out-of-home care reporting population pursuant to § 1355.42(a),

• State and tribal title IV–E agencies must report information on children who are in the adoption and guardianship assistance reporting population pursuant to § 1355.42(b), and

• State title IV–E agencies must report ICWA-related information in the out-of-home care data file.

Burden Estimate

In this section, we provide a burden estimate for this final rule and briefly explain how we calculated it, using the 2019 NPRM burden estimate since we did not make substantive changes in this final rule. Changes in the final rule estimate are attributed to updated input numbers, such as labor rate and number of children in foster care.

2016 Final Rule: In the 2016 final rule, we had estimated the total annual burden hours for both recordkeeping and reporting to be 970,226 hours at a total cost of $81,499,084 ($40,749,492 at 50 percent Federal Financial Participation (FFP)). As we discovered from analyzing the 2018 ANPRM comments, the 2016 final rule burden estimate was low and did not appropriately account for the time and resources required to collect and report the many and detailed ICWA-related data elements. Through the comments process of the 2018 ANPRM and 2019 NPRM, we are able to provide a more grounded burden estimate that is based on state estimated hours and costs.

2019 NPRM: Through the 2018 ANPRM, ACF asked the public to give specific feedback on the AFCARS data elements, costs to implement, and burden hours to complete the work required to comply with the AFCARS requirements in 2016 final rule. As we explained in the 2019 NPRM (84 FR 16587), we analyzed the 2018 ANPRM comments from states on the burden to complete the 2016 final rule. States ranged considerably in estimating the work needed and length of time it would take to comply with the 2016 final rule, which is expected and appropriate because there is considerable variability across states in sophistication of information systems, availability of both staff and financial resources, and populations of children in care. Thus, we used the median of the states' estimates for the estimates related to training and developing or modifying procedures and systems. We used the average of the states' estimates for the estimates of gathering/entering information, reporting, and the labor rate. Based on the 2018 ANPRM comments, we updated our estimate for the total burden of the 2016 final rule to be 1,768,744 hours. To estimate the burden of the 2019 NPRM, we used a revised 2016 final rule estimate that was based on states' 2018 ANPRM comments and reduced the hours by approximately 33 percent, which represented the approximate workload reduction associated with reporting fewer data elements and the type of data elements that we removed, which specifically were qualitative in nature and required a significant amount of training and staff time to locate the information and ensure proper data entry.

As we explained in the 2019 NPRM (84 FR 16589), adjustments to the recordkeeping burden estimates were based on the information provided by states in response to the 2018 ANPRM:

• For the out-of-home care data file, states provided estimates that ranged from 3 to 15 hours related to the tasks of searching data sources, gathering information, and entering the information into the system for the 2016 final rule. The range depended on whether the work was for the qualitative ICWA-related data elements or not. The average of the hours provided from the states that broke out this information in their 2018 ANPRM comments was 6 hours annually. We used the average because there were not significant outliers in the comments provided. Then we reduced the 6 hours by 33 percent since that represents the reduction in data elements to be reported.

• For the adoption and guardianship assistance data file, the data elements did not significantly change and we did not receive information from state estimates to determine that a change in these estimates was warranted. The only changes are attributable to updated numbers of children in adoption or guardianship assistance agreements, thus we estimated in the 2019 NPRM that updates or changes on an annual or biennial basis will take an average of 0.2 hours annually for records of children who have an adoption assistance agreement and 0.3 hours annually for children who have a guardianship assistance agreement.

• Developing or modifying standard operating procedures and systems to collect, validate, and verify the information and adjust existing ways to comply with the AFCARS requirements was estimated at 6,700 hours annually. States provided estimates in response to the 2018 ANPRM that ranged from 1,000 to 20,000 hours, which varied widely depending on the size of the state's out-of-home care population, type, sophistication, and age of systems. To estimate the annual hours, we chose to use the median of these estimates provided by the state commenters, rather than relying on the average of

those provided in the comments, because it would be distorted by the considerable hour range. The median hours from state's estimates was 10,000, and we reduced it by 33 percent since that represents the reduction in data elements to be reported.

• Administrative tasks associated with training personnel on the AFCARS requirements (*e.g.,* reviewing instructions, developing the training and manuals) and training personnel on AFCARS requirements we estimated would take on average 7,086 hours annually. In response to the 2018 ANPRM, states provided varying estimates for the hours and cost of training that were not broken out the same way. For example, one estimate was 40 hours to develop training materials and 2 hours of training per staff person. Other estimates were only totals of training hours that ranged between 42,712 to 102,000 hours encompassing initial and ongoing training to implement the 2016 final rule. Another estimate broke out ongoing training at 8,500 hours annually. To estimate the annual hours related to training tasks, we used the median of the hours provided from the 2018 ANPRM comments, rather than relying on the average, because it would be distorted by the considerable hour ranges and associated tasks. We understand that training hours will vary depending on the size of the agency's workforce needing training. The median hours from state's estimates was 10,576, and we reduced it by 33 percent since that represents the reduction in data elements to be reported.

For reporting, we explained in the 2019 NPRM (84 FR 16589) that very few states broke out reporting in their 2018 ANPRM comments and the average of the hours provided came to 26 hours. Since the 2019 NPRM reduces the data elements by 33 percent, we reduced the estimated burden related to reporting that amount arriving at 17 hours for this task.

For the labor rate, the 2018 ANPRM comments provided many job titles that would be involved in implementing, which included a mix of programming, management, caseworkers, and legal staff that varied depending on the size and functions of the state and local governments. The 2016 final rule included mostly computer analysts and social service managers which gave us an estimate of $84. The 2019 NPRM included more positions, such as office and administrative support occupations, community and social service operations and gave us an estimate of $72.

Comments in response to the 2019 NPRM: We explained in the 2019 NPRM that since the 2018 ANPRM comments were very thorough and helpful to inform the burden estimates, we feel confident that the burden estimate provided in the 2019 NPRM more accurately reflects the burden of reporting AFCARS information. ACF asked the public to respond to the streamlined AFCARS proposed in the 2019 NPRM. States expressed that the burden of the 2019 NPRM will be less than the 2016 final rule, commenting that they supported the streamlined AFCARS because it will be less burdensome than the 2016 final rule. Nine states provided estimates in response to the 2019 NPRM for costs and burden hours to comply with the 2019 NPRM. These estimates ranged considerably depending on the tasks the state attributed the burden to and whether it was a total for all work needed to implement the rule. State estimates for burden hours ranged between 32,900 and 111,000 total hours for all work needed to implement the rule, which included developing/modifying procedures, systems changes, and training, but not all states included training in their estimates, leading to lower burden estimates. State cost estimates ranged from $88,000 to over $1 million, the variability due to either including all work over multiple years or only providing total costs for one task, such as systems changes. We did not make changes to the burden estimates in this final rule based on this additional information because there was not enough detailed information to draw any different conclusions than we did in calculating the burden estimates for the 2019 NPRM. Tribal title IV–E agencies did not provide burden estimates in their comments. In this section, we discuss our assumptions and calculations for the estimates.

Respondents: The 69 respondents comprise 52 state title IV–E agencies and 17 tribal title IV–E agencies, which are Indian tribes, tribal organizations or consortium with an approved title IV–E plan under section 479B of the Act. The estimates provided in the rule are spread across respondents for the purposes of the PRA estimates. However, we understand that actual burden hours and costs will vary due to sophistication and capacity of information systems, availability of staff and financial resources, and populations of children in care.

Recordkeeping burden: Searching data sources, gathering information, and entering the information into the system, developing or modifying procedures and systems to collect, validate, and verify the information and adjusting existing ways to comply with AFCARS requirements, administrative tasks associated with training personnel on the AFCARS requirements (*e.g.,* reviewing instructions, developing the training and manuals), and training personnel on AFCARS requirements.

Reporting burden: Extracting the information for AFCARS reporting and transmitting the information to ACF.

Annualized Cost to the Federal Government

Federal reimbursement under title IV–E will be available for a portion of the costs that title IV–E agencies will incur as a result of the revisions proposed in this rule, depending on each agency's cost allocation plan, information system, and other factors. For this estimate, we used the 50 percent FFP rate.

Collection—AFCARS	Total annual burden hours	Average hourly labor rate	Total cost	Estimate Federal costs (50% FFP)
Recordkeeping	1,178,304	$73	$86,016,192	$43,008,096
Reporting	2,346	73	171,258	85,629
Total				43,093,725

Cost savings of this final rule over the 2016 final rule: 588,094 hours × $73 labor rate = $42,930,862.

Assumptions for Estimates

We made a number of assumptions when calculating the burden and costs:

• *Number of children in out-of-home care:* To determine the number of children for which title IV–E agencies

will have to report in the out-of-home care data file on average, ACF used the most recent FY 2018 AFCARS data available: 262,956 children entered foster care during FY 2018. Of those, 5,856 children had a reported race of American Indian/Alaska Native. We used the number of children who entered foster care rather than the entire population of children in foster care because agencies will not have to collect and report all data elements on all children in foster care; therefore, this accounts for the variances in burden. This is consistent with previous burden estimate and savings calculations in the 2016 final rule and the 2019 NPRM, which are what we use to estimate the relative savings of the 2019 NPRM and this final rule.

• *Out-of-home care data elements:* For the out-of-home care data file, the 2016 final rule required approximately 272 items on which we require title IV–E agencies to report information. In this final rule, we reduced these data points to approximately 183, representing 170 data points retained without change from the 2016 final rule and 13 modified data points. This represents approximately a 33 percent reduction in the total items that title IV–E agencies must report for this final rule compared to the 2016 final rule.

• *Number of children receiving adoption and guardianship assistance:* To determine the number of children for which title IV–E agencies must report in the adoption and guardianship assistance file, ACF used the most recent title IV–E Programs Quarterly Financial Report, CB–496, for FY 2018: 488,870 children received title IV–E adoption assistance and 32,204 children received guardianship assistance.

• *Adoption and guardianship assistance data elements:* There are approximately 20 items where we require title IV–E agencies report information for the adoption and guardianship assistance data file, which is not a significant change from the 2016 final rule.

• *Systems changes:* ACF assumed that the burden for title IV–E agencies to modify systems was based in part on the estimates states provided in response to the 2019 NPRM. Most title IV–E agencies will require revisions to electronic case management systems to meet the requirements in this final rule. However, ACF anticipates that a state's CCWIS will lead to more efficiency and less costs and burden associated with AFCARS reporting.

• *Labor rate:* ACF assumes that there will be a mix of the following positions working to meet both the one-time and annual requirements of this rule. We reviewed 2018 Bureau of Labor Statistics data and for this estimate we used the job roles of: Computer Information and Systems Managers (11–3021) with an average hourly wage of $73.49; Computer and Mathematical Occupations (15–0000) (*e.g.* computer and information analysts, computer programmers, and database and systems administrators) with an average hourly wage of $44.01; Office and Administrative Support Occupations (43–000) (*e.g.,* administrative assistants, data entry, legal secretaries, government program eligibility interviewers, information and record clerks) with an average hourly wage of $18.75; Social and Community Service Managers (11–9151) with an average hourly wage estimate of $34.46; Community and Social Service Operations (21–0000) (*e.g.* Social Workers, Child and Family Social Workers, Counselors, Social Service Specialists) with an average hourly wage of $23.69; and Paralegals and Legal Assistants (23–2011) with an average hourly wage estimate of $26.20. ACF averaged these wages to come to an average labor rate of $36.77. In order to ensure we took into account overhead costs associated with these labor costs, ACF doubled this rate ($73).

Calculations for Estimates

For the 2019 NPRM estimates, we reduced the estimates that were in the 2016 final rule by 33 percent to represent the reduction in the workload associated with reporting the data proposed in the 2019 NPRM compared to the 2016 final rule. We carried forward this estimated reduction of 33 percent in this final rule because we did not make any substantive changes to the amount of data the title IV–E agency must report. Thus, the reduction in costs and burden hours from the 2016 final rule is reflected.

Recordkeeping: We estimated a total of 1,178,304 record keeping hours annually, as summarized below. We are finalizing the data elements as proposed, and therefore, did not need to revise the estimates related to work in these bullets and only updated population numbers.

• For the out-of-home care data file, searching data sources, gathering information, and entering the information into the system would take on average 4.02 hours annually for all children who enter foster care, for a total of 1,057,083 hours annually. The reduction in the estimate from the 2019 NPRM is based on the reduced number of children who entered foster care. (4.02 hours × 262,956 children = 1,057,083 annual hours for this bullet)

• For the adoption and guardianship assistance data file, we estimated in the 2019 NPRM that updates or changes on an annual or biennial basis will take an average of 0.2 hours annually for records of children who have an adoption assistance agreement and 0.3 hours annually for children who have a guardianship assistance agreement. The number of children in adoption or guardianship assistance agreements increased, which reflects the most recent data available, FY 2018. The new total annual hours is estimated to be 107,435.2. (0.2 hours × 488,870 children = 97,774 hours. 0.3 hours × 32,204 children = 9,661.2 hours. 97,774 hours + 9,661.2 hours = 107,435 total annual burden hours for this bullet.)

• Developing or modifying standard operating procedures and systems to collect, validate, and verify the information and adjust existing ways to comply with the AFCARS requirements is estimated at 6,700 hours annually.

• Administrative tasks associated with training personnel on the AFCARS requirements (*e.g.* reviewing instructions, developing the training and manuals) and training personnel on AFCARS requirements we estimate will take on average 7,086 hours annually. We understand that training hours will vary depending on the size of the agency's workforce needing training.

Reporting: We estimate that extracting the information for AFCARS reporting and transmitting the information to ACF would take on average 17 hours annually. The estimate of 17 hours is from the 2019 NPRM. We did not change this estimate because we did not make substantive changes to this final rule and we did not receive any information from commenters to determine that a change in these estimates is warranted.

Collection—AFCARS	Number of respondents	Number of responses per respondent	Average burden hours per response	Total annual burden hours for NPRM
Recordkeeping	69	2	8,538	1,178,304

Collection—AFCARS	Number of respondents	Number of responses per respondent	Average burden hours per response	Total annual burden hours for NPRM
Reporting	69	2	17	2,346
Total				1,180,650

Title IV–E agencies must comply with the current AFCARS requirements in 45 CFR 1355.40 and the appendix to part 1355 until September 30, 2022 (45 CFR 1355.40 and section IV of the preamble to this rule). On October 1, 2022 (FY 2023), title IV–E agencies must comply with §§ 1355.41 through 1355.47. The 2016 final rule was scheduled to become effective on October 1, 2020 (FY 2021). Because this final rule replaces the 2016 final rule, the year in which title IV–E agencies will experience savings from the 2016 final rule is FY 2023. We used fiscal years in this estimate because AFCARS data reporting periods are categorized by fiscal years. The savings is generated by the reductions finalized in this rule, which reduces the data that title IV–E agencies must report from the requirements established in the 2016 final rule. As discussed above, we estimated approximately a 33 percent reduction in the total items that title IV–E agencies must report in this final rule relative to the 2016 final rule; the numbers in the estimate for this final rule takes this into account. These charts represent the burden hour and cost savings we estimate that this final rule will have over the 2016 final rule's requirements. This final rule will save approximately 588,094 burden hours. After multiplying by the average wage rate of affected individuals, this amounts to $42,930,862 in savings each year relative to the 2016 final rule, in the year this final rule will become effective, FY 2023.

SAVINGS OF 2020 FINAL RULE RELATIVE TO 2016 FINAL RULE

Burden hour savings of this final rule	Total annual burden hours for 2016 final rule	Total annual burden hours for this final rule	Difference (hours)
FY 2023	1,768,744	1,180,650	588,094

In the above estimates, ACF acknowledges: (1) ACF has used average figures for title IV–E agencies of very different sizes and some of which may have larger populations of children served than other agencies, and (2) these are rough estimates based on the 2019 NPRM comments which ranged in the level of detail provided regarding burden hours, costs, and work needing to be completed.

We have submitted a copy of this final rule to OMB for its review of the rule's information collection and recordkeeping requirements. The requirements are not effective until they have been approved by OMB.

VII. Tribal Consultation Statement

ACF is committed to consulting with Indian tribes and tribal leadership to the extent practicable and permitted by law, prior to promulgating any regulation that has tribal implications and within the requirements of E.O. 13175 *Consultation and Coordination with Indian Tribal Governments.* As we developed this final rule, ACF engaged in consultation with tribes and their leadership as described in further detail below.

Description of Consultation

Prior to issuing the 2019 NPRM, we engaged in tribal consultation during the comment period of the ANPRM on May 15 and 16, 2018. During the 2019 NPRM comment period, we engaged in tribal consultation on June 3, 4, and 6, 2019.

Consultation during the 2018 ANPRM comment period. Prior to the May 2018 consultation, we ensured that adequate information and notice was provided to tribes about the 2018 ANPRM and AFCARS and was publicly available by posting this information on the CB website, emailing it to CB's tribal lists, and issuing an Information Memorandum announcing publication of the 2018 ANPRM on March 16, 2018 (ACYF–CB–IM–18–01).

Consultation during the 2019 NPRM comment period. Prior to the June 2019 consultation, we ensured that adequate information about the 2019 NPRM and AFCARS was provided to tribes and was publicly available. Specifically, in April and May 2019, we emailed notices of the dates and times of tribal consultations to CB's tribal email lists, mailed the notices to tribal leaders and representatives, emailed notification of the publication of the 2019 NPRM to CB's tribal email lists, and issued an Information Memorandum announcing publication of the 2019 NPRM (ACYF–CB–IM–19–02). In preparation for the June 2019 consultations, CB officials held a webinar in May 2019 to provide the background and history of regulation development for AFCARS, the purpose of the 2019 NPRM including the Executive Order precipitating another look at AFCARS, and an overview of the 2019 NPRM. CB held in-person consultation on June 3, 2019 in New Mexico and tribal consultation via conference calls on June 4 and 6, 2019.

Summary of Concerns and Response

During the 2018 consultation, tribal leaders, officials, and representatives identified the ICWA-related information they felt was important to retain in AFCARS because it was essential in determining whether ICWA applied to a child or it provided the basic following information on ICWA's requirements: Information on the tribal membership of children in foster care and their foster care/adoptive placements, whether ICWA applies to the child, and notification of proceedings. During the consultation sessions in June 2019, tribal leaders, officials, and representatives expressed a desire to retain all of the ICWA-related data elements from the 2016 final rule, including detailed information on ICWA's requirements that are tied to DOI's regulations, ICWA statute, and court actions and expressed opposition to a modification or reduction of any data elements. They stated that ICWA's importance outweighs the state's burden to report the information to AFCARS

and the information would inform compliance with ICWA.

As we explained earlier, we are retaining only the ICWA-related data elements identified in the 2019 NPRM:

- Inquiries made whether the child is an Indian child under ICWA,
- whether ICWA applies for the child and the date that the state title IV–E agency was notified by the Indian tribe or state or tribal court that ICWA applies,
- notification to the Indian tribe, and
- tribal membership of child, mother, father, foster parents, adoptive parents, and legal guardians.

We are committed to obtaining more information on Indian children who are in out-of-home care through appropriate and alternative methods that allow for a fuller understanding of ICWA's role in child welfare cases that AFCARS cannot provide. For example, as we noted in the 2019 NPRM (84 FR 16578), the next Court Improvement Program (CIP) program instruction will emphasize collecting and tracking ICWA-related data and will be coupled with technical assistance through the CB's technical assistance provider for CIP grantees and the courts to help address this historic and ongoing information gap.

However, as we described in the 2019 NPRM, there are significant barriers in obtaining timely and relevant data in a format that would be useful for the purpose of determining ICWA compliance. Further, HHS is not the cognizant authority over implementing, overseeing, or assessing compliance with ICWA; that agency is DOI.

Agency Position on Need for Regulation

In section V of this final rule, we responded to comments on the ICWA-related data elements and explained our rationale for not making changes in this final rule. We also provided the parameters of our authority to require title IV–E agencies to report AFCARS data and clarified that the data is not appropriate for AFCARS reporting because the purpose relates to compliance with a law that is not under HHS's purview or authority. As we developed this final rule, our aim was to reduce burden on title IV–E agencies and clarify any misrepresentations of our statutory obligations under section 479 of the Act. We retain the data elements as proposed so that we can understand, on a national level, key information about Native American children in foster care under ACF's statutory authority, for example whether the connections to their communities are preserved. This authority in section 479(c)(3) of the Act does not permit ACF to require states to report specific details on ICWA's requirements in AFCARS to be used for ICWA compliance.

List of Subjects in 45 CFR Part 1355

Adoption and foster care, Child welfare, Grant programs—social programs.

(Catalog of Federal Domestic Assistance Program Number 93.658, Foster Care Maintenance; 93.659, Adoption Assistance; 93.645, Child Welfare Services—State Grants)

Dated: May 1, 2020.

Lynn A. Johnson,

Assistant Secretary for Children and Families.

Approved: May 4, 2020.

Alex M. Azar II,

Secretary.

For the reasons set forth in the preamble, ACF amends 45 CFR part 1355 as follows:

PART 1355—GENERAL

■ 1. The authority citation for part 1355 continues to read as follows:

Authority: 42 U.S.C. 620 *et seq.,* 42 U.S.C. 670 *et seq.;* 42 U.S.C. 1302.

■ 2. Revise § 1355.40(a) to read as follows:

§ 1355.40 Foster care and adoption data collection.

(a) *Scope.* State and tribal title IV–E agencies must follow the requirements of this section and appendices A through E of this part until September 30, 2022. As of October 1, 2022, state and tribal title IV–E agencies must comply with §§ 1355.41 through 1355.47.

* * * * *

§ 1355.41 [Amended]

■ 3. Remove § 1355.41(c).

■ 4. Revise § 1355.43(b)(3) to read as follows:

§ 1355.43 Data reporting requirements.

* * * * *

(b) * * *

(3) For a child who had an out-of-home care episode(s) as defined in § 1355.42(a) prior to October 1, 2022, the title IV–E agency must report only the information for the data described in § 1355.44(d)(1) and (g)(1) and (3) for the out-of-home care episode(s) that occurred prior to October 1, 2022.

* * * * *

■ 5. Revise § 1355.44 to read as follows:

§ 1355.44 Out-of-home care data file elements.

(a) *General information*—(1) *Title IV–E agency.* Indicate the title IV–E agency responsible for submitting the Adoption and Foster Care Analysis and Reporting System (AFCARS) data in a format according to ACF's specifications.

(2) *Report date.* The report date corresponds with the end of the report period. Indicate the last month and the year of the report period.

(3) *Local agency.* Indicate the local county, jurisdiction, or equivalent unit that has primary responsibility for the child in a format according to ACF's specifications.

(4) *Child record number.* Indicate the child's record number. This is an encrypted, unique person identification number that is the same for the child, no matter where the child lives while in the placement and care responsibility of the title IV–E agency in out-of-home care and across all report periods and episodes. The title IV–E agency must apply and retain the same encryption routine or method for the person identification number across all report periods. The record number must be encrypted in accordance with ACF standards.

(b) *Child information*—(1) *Child's date of birth.* Indicate the month, day and year of the child's birth. If the actual date of birth is unknown because the child has been abandoned, provide an estimated date of birth. ''Abandoned'' means that the child was left alone or with others and the identity of the parent(s) or legal guardian(s) is unknown and cannot be ascertained. This includes a child left at a ''safe haven.''

(2) *Child's sex.* Indicate whether the child is ''male'' or ''female.''

(3) *Reason to know a child is an ''Indian Child'' as defined in the Indian Child Welfare Act (ICWA).* For state title IV–E agencies only: Indicate whether the state title IV–E agency made inquiries whether the child is an Indian child as defined in ICWA. Indicate ''yes'' or ''no.''

(4) *Child's tribal membership.* For state title IV–E agencies only:

(i) Indicate whether the child is a member of or eligible for membership in a federally recognized Indian tribe. Indicate ''yes,'' ''no,'' or ''unknown''.

(ii) If the state title IV–E agency indicated ''yes'' in paragraph (b)(4)(i) of this section, indicate all federally recognized Indian tribe(s) that may potentially be the Indian child's tribe(s). The title IV–E agency must submit the information in a format according to ACF's specifications.

(5) *Application of ICWA.* For state title IV–E agencies only:

(i) Indicate whether ICWA applies for the child. Indicate ''yes,'' ''no,'' or ''unknown''.

(ii) If the state title IV–E agency indicated ''yes'' in paragraph (b)(5)(i) of

this section, indicate the date that the state title IV–E agency was notified by the Indian tribe or state or tribal court that ICWA applies.

(6) *Notification.* For state title IV–E agencies only: If the state title IV–E agency indicated ''yes'' to paragraph (b)(5)(i) of this section, the state title IV–E agency must indicate whether the Indian child's tribe(s) was sent legal notice in accordance with 25 U.S.C. 1912(a). Indicate ''yes'' or ''no.''

(7) *Child's race.* In general, a child's race is determined by the child, the child's parent(s) or legal guardian(s). Indicate whether each race category listed in paragraphs (b)(7)(i) through (viii) of this section applies with a ''yes'' or ''no.''

(i) *Race—American Indian or Alaska Native.* An American Indian or Alaska Native child has origins in any of the original peoples of North or South America (including Central America), and maintains tribal affiliation or community attachment.

(ii) *Race—Asian.* An Asian child has origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand and Vietnam.

(iii) *Race—Black or African American.* A Black or African American child has origins in any of the black racial groups of Africa.

(iv) *Race—Native Hawaiian or Other Pacific Islander.* A Native Hawaiian or Other Pacific Islander child has origins in any of the original peoples of Hawaii, Guam, Samoa or other Pacific Islands.

(v) *Race—White.* A white child has origins in any of the original peoples of Europe, the Middle East or North Africa.

(vi) *Race—unknown.* The child or parent or legal guardian does not know, or is unable to communicate the race, or at least one race of the child. This category does not apply when the child has been abandoned or the parents failed to return and the identity of the child, parent(s), or legal guardian(s) is known.

(vii) *Race—abandoned.* The child's race is unknown because the child has been abandoned. ''Abandoned'' means that the child was left alone or with others and the identity of the parent(s) or legal guardian(s) is unknown and cannot be ascertained. This includes a child left at a ''safe haven.''

(viii) *Race—declined.* The child or parent(s) or legal guardian(s) has declined to identify a race.

(8) *Child's Hispanic or Latino ethnicity.* In general, a child's ethnicity is determined by the child or the child's parent(s) or legal guardian(s). A child is of Hispanic or Latino ethnicity if the child is a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin, regardless of race. Indicate whether this category applies with a ''yes'' or ''no.'' If the child or the child's parent(s) or legal guardian(s) does not know or is unable to communicate whether the child is of Hispanic or Latino ethnicity, indicate ''unknown.'' If the child is abandoned indicate ''abandoned.'' Abandoned means that the child was left alone or with others and the identity of the parent(s) or legal guardian(s) is unknown and cannot be ascertained. This includes a child left at a ''safe haven.'' If the child or the child's parent(s) or legal guardian(s) refuses to identify the child's ethnicity, indicate ''declined.''

(9) *Health assessment.* Indicate whether the child had a health assessment during the current out-of-home care episode. This assessment could include an initial health screening or any follow-up health screening pursuant to section 422(b)(15)(A) of the Act. Indicate ''yes'' or ''no.''

(10) *Health, behavioral or mental health conditions.* Indicate whether the child was diagnosed by a qualified professional, as defined by the state or tribe, as having a health, behavioral or mental health condition, prior to or during the child's current out-of-home care episode as of the last day of the report period. Indicate ''child has a diagnosed condition'' if a qualified professional has made such a diagnosis and for each paragraph (b)(10)(i) through (xi) of this section, indicate ''existing condition,'' ''previous condition'' or ''does not apply,'' as applicable. ''Previous condition'' means a previous diagnoses that no longer exists as a current condition. Indicate ''no exam or assessment conducted'' if a qualified professional has not conducted a medical exam or assessment of the child and leave paragraphs (b)(10)(i) through (xi) of this section blank. Indicate ''exam or assessment conducted and none of the conditions apply'' if a qualified professional has conducted a medical exam or assessment and has concluded that the child does not have one of the conditions listed and leave paragraphs (b)(10)(i) through (xi) of this section blank. Indicate ''exam or assessment conducted but results not received'' if a qualified professional has conducted a medical exam or assessment but the title IV–E agency has not yet received the results of such an exam or assessment and leave paragraphs (b)(10)(i) through (xi) of this section blank.

(i) *Intellectual disability.* The child has, or had previously, significantly sub-average general cognitive and motor functioning existing concurrently with deficits in adaptive behavior manifested during the developmental period that adversely affect the child's socialization and learning.

(ii) *Autism spectrum disorder.* The child has, or had previously, a neurodevelopment disorder, characterized by social impairments, communication difficulties, and restricted, repetitive, and stereotyped patterns of behavior. This includes the range of disorders from autistic disorder, sometimes called autism or classical autism spectrum disorder, to milder forms known as Asperger syndrome and pervasive developmental disorder not otherwise specified.

(iii) *Visual impairment and blindness.* The child has, or had previously, a visual impairment that may adversely affect the day-to-day functioning or educational performance, such as blindness, amblyopia, or color blindness.

(iv) *Hearing impairment and deafness.* The child has, or had previously, an impairment in hearing, whether permanent or fluctuating, that adversely affects the child's day-to-day functioning and educational performance.

(v) *Orthopedic impairment or other physical condition.* The child has, or had previously, a physical deformity, such as amputations and fractures or burns that cause contractures, or an orthopedic impairment, including impairments caused by a congenital anomalies or disease, such as cerebral palsy, spina bifida, multiple sclerosis, or muscular dystrophy.

(vi) *Mental/emotional disorders.* The child has, or had previously, one or more mood or personality disorders or conditions over a long period of time and to a marked degree, such as conduct disorder, oppositional defiant disorder, emotional disturbance, anxiety disorder, obsessive-compulsive disorder, or eating disorder.

(vii) *Attention deficit hyperactivity disorder.* The child has, or had previously, a diagnosis of the neurobehavioral disorders of attention deficit hyperactivity disorder (ADHD) or attention deficit disorder (ADD).

(viii) *Serious mental disorders.* The child has, or had previously, a diagnosis of a serious mental disorder or illness, such as bipolar disorder, depression, psychotic disorders, or schizophrenia.

(ix) *Developmental delay.* The child has been assessed by appropriate diagnostic instruments and procedures and is experiencing delays in one or

more of the following areas: Physical development or motor skills, cognitive development, communication, language, or speech development, social or emotional development, or adaptive development.

(x) *Developmental disability.* The child has, or had previously been diagnosed with a developmental disability as defined in the Developmental Disabilities Assistance and Bill of Rights Act of 2000 (Pub. L. 106–402), section 102(8). This means a severe, chronic disability of an individual that is attributable to a mental or physical impairment or combination of mental and physical impairments that manifests before the age of 22, is likely to continue indefinitely and results in substantial functional limitations in three or more areas of major life activity. Areas of major life activity include self-care, receptive and expressive language, learning, mobility, self-direction, capacity for independent living, economic self-sufficiency, and reflects the individual's need for a combination and sequence of special, interdisciplinary, or generic services, individualized supports or other forms of assistance that are of lifelong or extended duration and are individually planned and coordinated. If a child is given the diagnosis of ''developmental disability,'' do not indicate the individual conditions that form the basis of this diagnosis separately in other data elements.

(xi) *Other diagnosed condition.* The child has, or had previously, a diagnosed condition or other health impairment other than those described in paragraphs (b)(10)(i) through (x) of this section, which requires special medical care, such as asthma, diabetes, chronic illnesses, a diagnosis as HIV positive or AIDS, epilepsy, traumatic brain injury, other neurological disorders, speech/language impairment, learning disability, or substance use issues.

(11) *School enrollment.* Indicate whether the child is a full-time student at, and enrolled in (or in the process of enrolling in), ''elementary'' or ''secondary'' education, or is a full or part-time student at and enrolled in a ''post-secondary education or training'' or ''college,'' as of the earlier of the last day of the report period or the day of exit for a child exiting out-of-home care prior to the end of the report period. A child is still considered enrolled in school if the child would otherwise be enrolled in a school that is currently out of session. An ''elementary or secondary school student'' is defined in section 471(a)(30) of the Act as a child that is enrolled (or in the process of enrolling) in an institution which provides elementary or secondary education, as determined under the law of the state or other jurisdiction in which the institution is located, instructed in elementary or secondary education at home in accordance with a home school law of the state or other jurisdiction in which the home is located, in an independent study elementary or secondary education program in accordance with the law of the state or other jurisdiction in which the program is located, which is administered by the local school or school district, or incapable of attending school on a full-time basis due to the medical condition of the child, which incapability is supported by a regularly updated information in the case plan of the child. Enrollment in ''post-secondary education or training'' refers to full or part-time enrollment in any post-secondary education or training, other than an education pursued at a college or university. Enrollment in ''college'' refers to a child that is enrolled full or part-time at a college or university. If child has not reached compulsory school age, indicate ''not school-age.'' If the child has reached compulsory school-age, but is not enrolled or is in the process of enrolling in any school setting full-time, indicate ''not enrolled.''

(12) *Educational level.* Indicate the highest educational level from kindergarten to college or post-secondary education/training completed by the child as of the last day of the report period. If child has not reached compulsory school-age, indicate ''not school-age.'' Indicate ''kindergarten'' if the child is currently in or about to begin 1st grade. Indicate ''1st grade'' if the child is currently in or about to begin 2nd grade. Indicate ''2nd grade'' if the child is currently in or about to begin 3rd grade. Indicate ''3rd grade'' if the child is currently in or about to begin 4th grade. Indicate ''4th grade'' if the child is currently in or about to begin 5th grade. Indicate ''5th grade'' if the child is currently in or about to begin 6th grade. Indicate ''6th grade'' if the child is currently in or about to begin 7th grade. Indicate ''7th grade'' if the child is currently in or about to begin 8th grade. Indicate ''8th grade'' if the child is currently in or about to begin 9th grade. Indicate ''9th grade'' if the child is currently in or about to begin 10th grade. Indicate ''10th grade'' if the child is currently in or about to begin 11th grade. Indicate ''11th grade'' if the child is currently in or about to begin 12th grade. Indicate ''12th grade'' if the child has graduated from high school. Indicate ''GED'' if the child has completed a general equivalency degree or other high school equivalent. Indicate ''Post-secondary education or training'' if the child has completed any post-secondary education or training, including vocational training, other than an education pursued at a college or university. Indicate ''College'' if the child has completed at least a semester of study at a college or university.

(13) *Pregnant or parenting.* (i) Indicate whether the child is pregnant as of the end of the report period. Indicate ''yes'' or ''no.''

(ii) Indicate whether the child has ever fathered or bore a child. Indicate ''yes'' or ''no.''

(iii) Indicate whether the child and his/her child(ren) are placed together at any point during the report period, if the response in paragraph (b)(13)(ii) of this section is ''yes.'' Indicate ''yes,'' ''no,'' or ''not applicable'' if the response in paragraph (b)(13)(ii) of this section is ''no.''

(14) *Special education.* Indicate whether the child has an Individualized Education Program (IEP) as defined in section 614(d)(1) of Part B of Title I of the Individuals with Disabilities Education Act (IDEA) and implementing regulations, or an Individualized Family Service Program (IFSP) as defined in section 636 of Part C of Title I of IDEA and implementing regulations, as of the end of the report period. Indicate ''yes'' if the child has either an IEP or an IFSP or ''no'' if the child has neither.

(15) *Prior adoption.* Indicate whether the child experienced a prior legal adoption before the current out-of-home care episode. Include any public, private or independent adoption in the United States or adoption in another country and tribal customary adoptions. Indicate ''yes,'' ''no'' or ''abandoned'' if the information is unknown because the child has been abandoned. ''Abandoned'' means that the child was left alone or with others and the identity of the parent(s) or legal guardian(s) is unknown and cannot be ascertained. This includes a child left at a ''safe haven.'' If the child has experienced a prior legal adoption, the title IV–E agency must complete paragraphs (b)(15)(i) and (ii) of this section; otherwise the title IV–E agency must leave those paragraphs blank.

(i) *Prior adoption date.* Indicate the month and year that the most recent prior adoption was finalized. In the case of a prior intercountry adoption where the adoptive parent(s) readopted the child in the United States, the title IV–E agency must provide the date of the adoption (either the original adoption in

the home country or the re-adoption in the United States) that is considered final in accordance with applicable laws.

(ii) *Prior adoption intercountry.* Indicate whether the child's most recent prior adoption was an intercountry adoption, meaning that the child's prior adoption occurred in another country or the child was brought into the United States for the purposes of finalizing the prior adoption. Indicate ''yes'' or ''no.''

(16) *Prior guardianship general*—(i) *Prior guardianship.* Indicate whether the child experienced a prior legal guardianship before the current out-of-home care episode. Include any public, private or independent guardianship(s) in the United States that meets the definition in section 475(7) of the Act. This includes any judicially created relationship between a child and caretaker which is intended to be permanent and self-sustaining, as evidenced by the transfer to the caretaker of the following parental rights with respect to the child: Protection, education, care and control, custody, and decision making. Indicate ''yes,'' ''no,'' or ''abandoned'' if the information is unknown because the child has been abandoned. ''Abandoned'' means that the child was left alone or with others and the identity of the parent(s) or legal guardian(s) is unknown and cannot be ascertained. This includes a child left at a ''safe haven.'' If the child has experienced a prior legal guardianship, the title IV–E agency must complete paragraph (b)(16)(ii) of this section; otherwise the title IV–E agency must leave it blank.

(ii) *Prior guardianship date.* Indicate the month and year that the most recent prior guardianship became legalized.

(17) *Child financial and medical assistance.* Indicate whether the child received financial and medical assistance at any point during the six-month report period. Indicate ''child has received support/assistance'' if the child was the recipient of such assistance during the report period, and indicate which of the following sources of support described in paragraphs (b)(17)(i) through (viii) of this section ''applies'' or ''does not apply.'' Indicate ''no support/assistance received'' if none of these apply.

(i) *State/Tribal adoption assistance.* The child is receiving an adoption subsidy or other adoption assistance paid for solely by the state or Indian tribe.

(ii) *State/Tribal foster care.* The child is receiving a foster care payment that is solely funded by the state or Indian tribe.

(iii) *Title IV–E adoption subsidy.* The child is determined eligible for a title IV–E adoption assistance subsidy.

(iv) *Title IV–E guardianship assistance.* The child is determined eligible for a title IV–E guardianship assistance subsidy.

(v) *Title IV–A TANF.* The child is living with relatives who are receiving a Temporary Assistance for Needy Families (TANF) cash assistance payment on behalf of the child.

(vi) *Title IV–B.* The child's living arrangement is supported by funds under title IV–B of the Act.

(vii) *Chafee Program.* The child is living independently and is supported by funds under the John H. Chafee Foster Care Program for Successful Transition to Adulthood.

(viii) *Other.* The child is receiving financial support from another source not previously listed in paragraphs (b)(17)(i) through (vii) of this section.

(18) *Title IV–E foster care during report period.* Indicate whether a title IV–E foster care maintenance payment was paid on behalf of the child at any point during the report period that is claimed under title IV–E foster care with a ''yes'' or ''no,'' as appropriate. Indicate ''yes'' if the child has met all eligibility requirements of section 472(a) of the Act and the title IV–E agency has claimed, or intends to claim, Federal reimbursement for foster care maintenance payments made on the child's behalf during the report period.

(19) *Total number of siblings.* Indicate the total number of siblings of the child. A sibling to the child is his or her brother or sister by biological, legal, or marital connection. Do not include the child who is subject of this record in the total number. If the child does not have any siblings, the title IV–E agency must indicate ''0.'' If the title IV–E agency indicates ''0,'' the title IV–E agency must leave paragraphs (b)(20) and (21) of this section blank.

(20) *Siblings in foster care.* Indicate the number of siblings of the child who are in foster care, as defined in § 1355.20. A sibling to the child is his or her brother or sister by biological, legal, or marital connection. Do not include the child who is subject of this record in the total number. If the child does not have any siblings, the title IV–E agency must leave this paragraph (b)(20) blank. If the child has siblings, but they are not in foster care as defined in § 1355.20, the title IV–E agency must indicate ''0.'' If the title IV–E agency reported ''0,'' leave paragraph (b)(21) of this section blank.

(21) *Siblings in living arrangement.* Indicate the number of siblings of the child who are in the same living arrangement as the child, on the last day of the report period. A sibling to the child is his or her brother or sister by biological, legal, or marital connection. Do not include the child who is subject of this record in the total number. If the child does not have any siblings, the title IV–E agency must leave this paragraph (b)(21) blank. If the child has siblings, but they are not in the same living arrangement as the child, the title IV–E agency must indicate ''0.''

(c) *Parent or legal guardian information*—(1) *Year of birth of first parent or legal guardian.* If applicable, indicate the year of birth of the first parent (biological, legal or adoptive) or legal guardian of the child. To the extent that a child has both a parent and a legal guardian, or two different sets of legal parents, the title IV–E agency must report on those who had legal responsibility for the child. We are not seeking information on putative parent(s) in this paragraph (c)(1). If there is only one parent or legal guardian of the child, that person's year of birth must be reported here. If the child was abandoned indicate ''abandoned.'' ''Abandoned'' means that the child was left alone or with others and the identity of the child's parent(s) or legal guardian(s) is unknown and cannot be ascertained. This includes a child left at a ''safe haven.''

(2) *Year of birth of second parent or legal guardian.* If applicable, indicate the year of birth of the second parent (biological, legal or adoptive) or legal guardian of the child. We are not seeking information on putative parent(s) in this paragraph (c)(2). If the child was abandoned, indicate ''abandoned.'' ''Abandoned'' means that the child was left alone or with others and the identity of the child's parent(s) or legal guardian(s) is unknown and cannot be ascertained. This includes a child left at a ''safe haven.'' Indicate ''not applicable'' if there is not another parent or legal guardian.

(3) *Tribal membership mother.* For state title IV–E agencies only: Indicate whether the biological or adoptive mother is a member of an Indian tribe. Indicate ''yes,'' ''no,'' or ''unknown.''

(4) *Tribal membership father.* For state title IV–E agencies only: Indicate whether the biological or adoptive father is a member of an Indian tribe. Indicate ''yes,'' ''no,'' or ''unknown.''

(5) *Termination/modification of parental rights.* Indicate whether the termination/modification of parental rights for each parent (biological, legal and/or putative) was voluntary or involuntary. ''Voluntary'' means the parent voluntarily relinquished their parental rights to the title IV–E agency,

with or without court involvement. Indicate ''voluntary'' or ''involuntary.'' Indicate ''not applicable'' if there was no termination/modification and leave paragraphs (c)(5)(i) and (ii) of this section blank.

(i) *Termination/modification of parental rights petition.* Indicate the month, day and year that each petition to terminate/modify the parental rights of a biological, legal and/or putative parent was filed in court, if applicable. Indicate ''deceased'' if the parent is deceased. If a petition has not been filed, leave this paragraph (c)(5)(i) blank.

(ii) *Termination/modification of parental rights.* Enter the month, day and year that the parental rights were voluntarily or involuntarily terminated/modified, for each biological, legal and/or putative parent, if applicable. If the parent is deceased, enter the date of death.

(d) *Removal information*—(1) *Date of child's removal.* Indicate the removal date(s) in month, day and year format for each removal of a child who enters the placement and care responsibility of the title IV–E agency. For a child who is removed and is placed initially in foster care, indicate the date that the title IV–E agency received placement and care responsibility. For a child who ran away or whose whereabouts are unknown at the time the child is removed and is placed in the placement and care responsibility of the title IV–E agency, indicate the date that the title IV–E agency received placement and care responsibility. For a child who is removed and is placed initially in a non-foster care setting, indicate the date that the child enters foster care as the date of removal.

(2) *Removal transaction date.* A non-modifiable, computer-generated date which accurately indicates the month, day and year each response to paragraph (d)(1) of this section was entered into the information system.

(3) *Environment at removal.* Indicate the type of environment (household or facility) the child was living in at the time of each removal for each removal reported in paragraph (d)(1) of this section. Indicate ''parent household'' if the child was living in a household that included one or both of the child's parents, whether biological, adoptive or legal. Indicate ''relative household'' if the child was living with a relative(s), the relative(s) is not the child's legal guardian and neither of the child's parents were living in the household. Indicate ''legal guardian household'' if the child was living with a legal guardian(s), the guardian(s) is not the child's relative and neither of the child's parents were living in the household. Indicate ''relative legal guardian household'' if the child was living with a relative(s) who is also the child's legal guardian. Indicate ''justice facility'' if the child was in a detention center, jail or other similar setting where the child was detained. Indicate ''medical/mental health facility'' if the child was living in a facility such as a medical or psychiatric hospital or residential treatment center. Indicate ''other'' if the child was living in another situation not so described, such as living independently or homeless.

(4) *Child and family circumstances at removal.* Indicate all child and family circumstances that were present at the time of the child's removal and/or related to the child being placed into foster care for each removal reported in paragraph (d)(1) of this section. Indicate whether each circumstance described in paragraphs (d)(4)(i) through (xxxiv) of this section ''applies'' or ''does not apply'' for each removal indicated in paragraph (d)(1) of this section.

(i) *Runaway.* The child has left, without authorization, the home or facility where the child was residing.

(ii) *Whereabouts unknown.* The child's whereabouts are unknown and the title IV–E agency does not consider the child to have run away.

(iii) *Physical abuse.* Alleged or substantiated physical abuse, injury or maltreatment of the child by a person responsible for the child's welfare.

(iv) *Sexual abuse.* Alleged or substantiated sexual abuse or exploitation of the child by a person who is responsible for the child's welfare.

(v) *Psychological or emotional abuse.* Alleged or substantiated psychological or emotional abuse, including verbal abuse, of the child by a person who is responsible for the child's welfare.

(vi) *Neglect.* Alleged or substantiated negligent treatment or maltreatment of the child, including failure to provide adequate food, clothing, shelter, supervision or care by a person who is responsible for the child's welfare.

(vii) *Medical neglect.* Alleged or substantiated medical neglect caused by a failure to provide for the appropriate health care of the child by a person who is responsible for the child's welfare, although the person was financially able to do so, or was offered financial or other means to do so.

(viii) *Domestic violence.* Alleged or substantiated violent act(s), including any forceful detention of an individual that results in, threatens to result in, or attempts to cause physical injury or mental harm. This is committed by a person against another individual residing in the child's home and with whom such person is in an intimate relationship, dating relationship, is or was related by marriage, or has a child in common. This circumstance includes domestic violence between the child and his or her partner and applies to a child or youth of any age including those younger and older than the age of majority. This does not include alleged or substantiated maltreatment of the child by a person who is responsible for the child's welfare.

(ix) *Abandonment.* The child was left alone or with others and the parent or legal guardian's identity is unknown and cannot be ascertained. This does not include a child left at a ''safe haven'' as defined by the title IV–E agency. This category does not apply when the identity of the parent(s) or legal guardian(s) is known.

(x) *Failure to return.* The parent, legal guardian or caretaker did not or has not returned for the child or made his or her whereabouts known. This category does not apply when the identity of the parent, legal guardian or caretaker is unknown.

(xi) *Caretaker's alcohol use.* A parent, legal guardian or other caretaker responsible for the child uses alcohol compulsively that is not of a temporary nature.

(xii) *Caretaker's drug use.* A parent, legal guardian or other caretaker responsible for the child uses drugs compulsively that is not of a temporary nature.

(xiii) *Child alcohol use.* The child uses alcohol.

(xiv) *Child drug use.* The child uses drugs.

(xv) *Prenatal alcohol exposure.* The child has been identified as prenatally exposed to alcohol, resulting in fetal alcohol spectrum disorders such as fetal alcohol exposure, fetal alcohol effect, or fetal alcohol syndrome.

(xvi) *Prenatal drug exposure.* The child has been identified as prenatally exposed to drugs.

(xvii) *Diagnosed condition.* The child has a clinical diagnosis by a qualified professional of a health, behavioral or mental health condition, such as one or more of the following: Intellectual disability, emotional disturbance, specific learning disability, hearing, speech or sight impairment, physical disability or other clinically diagnosed condition.

(xviii) *Inadequate access to mental health services.* The child and/or child's family has inadequate resources to access the necessary mental health services outside of the child's out-of-home care placement.

(xix) *Inadequate access to medical services.* The child and/or child's family has inadequate resources to access the necessary medical services outside of the child's out-of-home care placement.

(xx) *Child behavior problem.* The child's behavior in his or her school and/or community adversely affects his or her socialization, learning, growth and/or moral development. This includes all child behavior problems, as well as adjudicated and non-adjudicated status or delinquency offenses and convictions.

(xxi) *Death of caretaker.* Existing family stress in caring for the child or an inability to care for the child due to the death of a parent, legal guardian or other caretaker.

(xxii) *Incarceration of caretaker.* The child's parent, legal guardian or caretaker is temporarily or permanently placed in jail or prison which adversely affects his or her ability to care for the child.

(xxiii) *Caretaker's significant impairment—physical/emotional.* A physical or emotional illness or disabling condition of the child's parent, legal guardian or caretaker that adversely limits his or her ability to care for the child.

(xxiv) *Caretaker's significant impairment—cognitive.* The child's parent, legal guardian or caretaker has cognitive limitations that impact his or her ability to function in areas of daily life, which adversely affect his or her ability to care for the child. It also may be characterized by a significantly below-average score on a test of mental ability or intelligence.

(xxv) *Inadequate housing.* The child's or his or her family's housing is substandard, overcrowded, unsafe or otherwise inadequate which results in it being inappropriate for the child to reside.

(xxvi) *Voluntary relinquishment for adoption.* The child's parent has voluntarily relinquished the child by assigning the physical and legal custody of the child to the title IV–E agency, in writing, for the purpose of having the child adopted. This includes a child left at a ''safe haven'' as defined by the title IV–E agency.

(xxvii) *Child requested placement.* The child, age 18 or older, has requested placement into foster care.

(xxviii) *Sex trafficking.* The child is a victim of sex trafficking at the time of removal.

(xxix) *Parental immigration detainment or deportation.* The parent is or was detained or deported by immigration officials.

(xxx) *Family conflict related to child's sexual orientation, gender identity, or gender expression.* There is family conflict related to the child's expressed or perceived sexual orientation, gender identity, or gender expression. This includes any conflict related to the ways in which a child manifests masculinity or femininity.

(xxxi) *Educational neglect.* Alleged or substantiated failure of a parent or caregiver to enroll a child of mandatory school age in school or provide appropriate home schooling or needed special educational training, thus allowing the child or youth to engage in chronic truancy.

(xxxii) *Public agency title IV–E agreement.* The child is in the placement and care responsibility of another public agency that has an agreement with the title IV–E agency pursuant to section 472(a)(2)(B) of the Act and on whose behalf title IV–E foster care maintenance payments are made.

(xxxiii) *Tribal title IV–E agreement.* The child is in the placement and care responsibility of an Indian tribe, tribal organization or consortium with which the title IV–E agency has an agreement and on whose behalf title IV–E foster care maintenance payments are made.

(xxxiv) *Homelessness.* The child or his or her family has no regular or adequate place to live. This includes living in a car, or on the street, or staying in a homeless or other temporary shelter.

(5) *Victim of sex trafficking prior to entering foster care.* Indicate whether the child had been a victim of sex trafficking before the current out-of-home care episode. Indicate ''yes'' if the child was a victim or ''no'' if the child had not been a victim.

(i) *Report to law enforcement.* If the title IV–E agency indicated ''yes'' in paragraph (d)(5) of this section, indicate whether the title IV–E agency made a report to law enforcement for entry into the National Crime Information Center (NCIC) database. Indicate ''yes'' if the agency made a report to law enforcement and indicate ''no'' if the agency did not make a report.

(ii) *Date.* If the title IV–E agency indicated ''yes'' in paragraph (d)(5)(i) of this section, indicate the date that the agency made the report to law enforcement.

(6) *Victim of sex trafficking while in foster care.* Indicate ''yes'' if the child was a victim of sex trafficking while in out-of-home care during the current out-of-home care episode. Indicate ''no'' if the child was not a victim of sex trafficking during the current out-of-home care episode.

(i) *Report to law enforcement.* If the title IV–E agency indicated ''yes'' in paragraph (d)(6) of this section, indicate whether the agency made a report to law enforcement for entry into the NCIC database. Indicate ''yes'' if the title IV–E agency made a report(s) to law enforcement and indicate ''no'' if the title IV–E agency did not make a report.

(ii) *Date.* If the title IV–E agency indicated ''yes'' in paragraph (d)(6)(i) of this section, indicate the date(s) the agency made the report(s) to law enforcement.

(e) *Living arrangement and provider information*—(1) *Date of living arrangement.* Indicate the month, day and year representing the first date of placement in each of the child's living arrangements for each out-of-home care episode. In the case of a child who has run away, whose whereabouts are unknown, or who is already in a living arrangement and remains there when the title IV–E agency receives placement and care responsibility, indicate the date of the Voluntary Placement Agreement or court order providing the title IV–E agency with placement and care responsibility for the child, rather than the date when the child was originally placed in the living arrangement.

(2) *Foster family home.* Indicate whether each of the child's living arrangements is a foster family home, with a ''yes'' or ''no'' as appropriate. If the child has run away or the child's whereabouts are unknown, indicate ''no.'' If the title IV–E agency indicates that the child is living in a foster family home, by indicating ''yes,'' the title IV–E agency must complete paragraph (e)(3) of this section. If the title IV–E agency indicates ''no,'' the title IV–E agency must complete paragraph (e)(4) of this section.

(3) *Foster family home type.* If the title IV–E agency indicated that the child is living in a foster family home in paragraph (e)(2) of this section, indicate whether each foster family home type listed in paragraphs (e)(3)(i) through (vi) of this section applies or does not apply; otherwise the title IV–E agency must leave paragraph (e)(3) blank.

(i) *Licensed home.* The child's living arrangement is licensed or approved by the state or tribal licensing/approval authority.

(ii) *Therapeutic foster family home.* The home provides specialized care and services.

(iii) *Shelter care foster family home.* The home is so designated by the state or tribal licensing/approval authority, and is designed to provide short-term or transitional care.

(iv) *Relative foster family home.* The foster parent(s) is related to the child by biological, legal or marital connection

and the relative foster parent(s) lives in the home as his or her primary residence.

(v) *Pre-adoptive home.* The home is one in which the family and the title IV–E agency have agreed on a plan to adopt the child.

(vi) *Kin foster family home.* The home is one in which there is a kin relationship as defined by the title IV–E agency, such as one where there is a psychological, cultural or emotional relationship between the child or the child's family and the foster parent(s) and there is not a legal, biological, or marital connection between the child and foster parent.

(4) *Other living arrangement type.* If the title IV–E agency indicated that the child's living arrangement is other than a foster family home in paragraph (e)(2) of this section, indicate the type of setting; otherwise the title IV–E agency must leave this paragraph (e)(4) blank. Indicate ''group home-family operated'' if the child is in a group home that provides 24-hour care in a private family home where the family members are the primary caregivers. Indicate ''group home-staff operated'' if the child is in a group home that provides 24-hour care for children where the care-giving is provided by shift or rotating staff. Indicate ''group home-shelter care'' if the child is in a group home that provides 24-hour care which is short-term or transitional in nature, and is designated by the state or tribal licensing/approval authority to provide shelter care. Indicate ''residential treatment center'' if the child is in a facility that has the purpose of treating children with mental health or behavioral conditions or if the child is placed with a parent who is in a licensed residential family-based treatment facility for substance abuse pursuant to section 472(j) of the Act. This does not include a qualified residential treatment program defined in section 472(k)(4) of the Act. Indicate ''qualified residential treatment program'' if the child is in a placement that meets all of the requirements of section 472(k)(2)(A) and (4) of the Act. Indicate ''child care institution'' if the child is in a private child care institution, or a public child care institution which accommodates no more than 25 children, and is licensed by the state or tribal authority responsible for licensing or approving child care institutions. This includes a setting specializing in providing prenatal, post-partum, or parenting supports for youth pursuant to section 472(k)(2)(B) of the Act, and a setting providing high-quality residential care and supportive services to children and youth who have been found to be, or are at risk of becoming, sex trafficking victims pursuant to section 472(k)(2)(D) of the Act. This does not include detention facilities, forestry camps, training schools or any other facility operated primarily for the detention of children who are determined to be delinquent. Indicate ''child care institution-shelter care'' if the child is in a child care institution and the institution is designated to provide shelter care by the state or tribal authority responsible for licensing or approving child care institutions and is short-term or transitional in nature. Indicate ''supervised independent living'' if the child is living independently in a supervised setting. Indicate ''juvenile justice facility'' if the child is in a secure facility or institution where alleged or adjudicated juvenile delinquents are housed. Indicate ''medical or rehabilitative facility'' if the child is in a facility where an individual receives medical or physical health care, such as a hospital. Indicate ''psychiatric hospital'' if the child is in a facility that provides emotional or psychological health care and is licensed or accredited as a hospital. Indicate ''runaway'' if the child has left, without authorization, the home or facility where the child was placed. Indicate ''whereabouts unknown'' if the child is not in the physical custody of the title IV–E agency or person or institution with whom the child has been placed, the child's whereabouts are unknown, and the title IV–E agency does not consider the child to have run away. Indicate ''placed at home'' if the child is home with the parent(s) or legal guardian(s) in preparation for the title IV–E agency to return the child home permanently.

(5) *Location of living arrangement.* Indicate whether each of the child's living arrangements reported in paragraph (e)(1) of this section is located within or outside of the reporting state or tribal service area or is outside of the country. Indicate ''out-of-state or out-of-tribal service area'' if the child's living arrangement is located outside of the reporting state or tribal service area but inside the United States. Indicate ''in-state or in-tribal service area'' if the child's living arrangement is located within the reporting state or tribal service area. Indicate ''out-of-country'' if the child's living arrangement is outside of the United States. Indicate ''runaway or whereabouts unknown'' if the child has run away from his or her living arrangement or the child's whereabouts are unknown. If the title IV–E agency indicates either ''out-of-state or out-of-tribal service area'' or ''out-of-country'' for the child's living arrangement, the title IV–E agency must complete paragraph (e)(6) of this section; otherwise the title IV–E agency must leave paragraph (e)(6) of this section blank.

(6) *Jurisdiction or country where child is living.* Indicate the state, tribal service area, Indian reservation, or country where the reporting title IV–E agency placed the child for each living arrangement, if the title IV–E agency indicated either ''out-of-state'' or ''out-of-tribal service area'' or ''out-of-country'' in paragraph (e)(5) of this section; otherwise the title IV–E agency must leave this paragraph (e)(6) blank. The title IV–E agency must report the information in a format according to ACF's specifications.

(7) *Marital status of the foster parent(s).* Indicate the marital status of the child's foster parent(s) for each foster family home living arrangement in which the child is placed, as indicated in paragraph (e)(3) of this section. Indicate ''married couple'' if the foster parents are considered united in matrimony according to applicable laws. Include common law marriage, where provided by applicable laws. Indicate ''unmarried couple'' if the foster parents are living together as a couple, but are not united in matrimony according to applicable laws. Indicate ''separated'' if the foster parent is legally separated or is living apart from his or her spouse. Indicate ''single adult'' if the foster parent is not married and is not living with another individual as part of a couple. If the response is either ''married couple'' or ''unmarried couple,'' the title IV–E agency must complete the paragraphs for the second foster parent in paragraphs (e)(14) through (18) of this section; otherwise the title IV–E agency must leave those paragraphs blank.

(8) *Child's relationship to the foster parent(s).* Indicate the type of relationship between the child and his or her foster parent(s), for each foster family home living arrangement in which the child is placed, as indicated in paragraph (e)(3) of this section. Indicate ''relative(s)'' if the foster parent(s) is the child's relative (by biological, legal or marital connection). Indicate ''non-relative(s)'' if the foster parent(s) is not related to the child (by biological, legal or marital connection). Indicate ''kin'' if the foster parent(s) has kin relationship to the child as defined by the title IV–E agency, such as one where there is a psychological, cultural or emotional relationship between the child or the child's family and the foster parent(s) and there is not a legal,

biological, or marital connection between the child and foster parent.

(9) *Year of birth for first foster parent.* Indicate the year of birth for the first foster parent for each foster family home living arrangement in which the child is placed, as indicated in paragraph (e)(3) of this section.

(10) *First foster parent tribal membership.* For state title IV–E agencies only: Indicate whether the first foster parent is a member of an Indian tribe. Indicate ''yes,'' ''no,'' or ''unknown.''

(11) *Race of first foster parent.* Indicate the race of the first foster parent for each foster family home living arrangement in which the child is placed, as indicated in paragraph (e)(3) of this section. In general, an individual's race is determined by the individual. Indicate whether each race category listed in paragraphs (e)(11)(i) through (vii) of this section applies with a ''yes'' or ''no.''

(i) *Race—American Indian or Alaska Native.* An American Indian or Alaska Native individual has origins in any of the original peoples of North or South America (including Central America) and maintains tribal affiliation or community attachment.

(ii) *Race—Asian.* An Asian individual has origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand and Vietnam.

(iii) *Race—Black or African American.* A Black or African American individual has origins in any of the black racial groups of Africa.

(iv) *Race—Native Hawaiian or Other Pacific Islander.* A Native Hawaiian or Other Pacific Islander individual has origins in any of the original peoples of Hawaii, Guam, Samoa or other Pacific Islands.

(v) *Race—White.* A White individual has origins in any of the original peoples of Europe, the Middle East or North Africa.

(vi) *Race—unknown.* The first foster parent does not know his or her race, or at least one race.

(vii) *Race—declined.* The first foster parent has declined to identify a race.

(12) *Hispanic or Latino ethnicity of first foster parent.* Indicate the Hispanic or Latino ethnicity of the first foster parent for each foster family home living arrangement in which the child is placed, as indicated in paragraph (e)(3) of this section. In general, an individual's ethnicity is determined by the individual. An individual is of Hispanic or Latino ethnicity if the individual is a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin, regardless of race. Indicate whether this category applies with a ''yes'' or ''no.'' If the first foster parent does not know his or her ethnicity indicate ''unknown.'' If the individual refuses to identify his or her ethnicity, indicate ''declined.''

(13) *Sex of first foster parent.* Indicate whether the first foster parent is ''female'' or ''male.''

(14) *Year of birth for second foster parent.* Indicate the birth year of the second foster parent for each foster family home living arrangement in which the child is placed, as indicated in paragraph (e)(3) of this section, if applicable. The title IV–E agency must leave this paragraph (e)(14) blank if there is no second foster parent according to paragraph (e)(7) of this section.

(15) *Second foster parent tribal membership.* For state title IV–E agencies only: Indicate whether the second foster parent is a member of an Indian tribe. Indicate ''yes,'' ''no,'' or ''unknown.''

(16) *Race of second foster parent.* Indicate the race of the second foster parent for each foster family home living arrangement in which the child is placed, as indicated in paragraph (e)(3) of this section, if applicable. In general, an individual's race is determined by the individual. Indicate whether each race category listed in paragraphs (e)(16)(i) through (vii) of this section applies with a ''yes'' or ''no.'' The title IV–E agency must leave this paragraph (e)(16) blank if there is no second foster parent according to paragraph (e)(7) of this section.

(i) *Race—American Indian or Alaska Native.* An American Indian or Alaska Native individual has origins in any of the original peoples of North or South America (including Central America) and maintains tribal affiliation or community attachment.

(ii) *Race—Asian.* An Asian individual has origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand and Vietnam.

(iii) *Race—Black or African American.* A Black or African American individual has origins in any of the black racial groups of Africa.

(iv) *Race—Native Hawaiian or Other Pacific Islander.* A Native Hawaiian or Other Pacific Islander individual has origins in any of the original peoples of Hawaii, Guam, Samoa or other Pacific Islands.

(v) *Race—White.* A White individual has origins in any of the original peoples of Europe, the Middle East or North Africa.

(vi) *Race—unknown.* The second foster parent does not know his or her race, or at least one race.

(vii) *Race—declined.* The second foster parent has declined to identify a race.

(17) *Hispanic or Latino ethnicity of second foster parent.* Indicate the Hispanic or Latino ethnicity of the second foster parent for each foster family home living arrangement in which the child is placed, as indicated in paragraph (e)(3) of this section, if applicable. In general, an individual's ethnicity is determined by the individual. An individual is of Hispanic or Latino ethnicity if the individual is a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin, regardless of race. Indicate whether this category applies with a ''yes'' or ''no.'' If the second foster parent does not know his or her ethnicity, indicate ''unknown.'' If the individual refuses to identify his or her ethnicity, indicate ''declined.'' The title IV–E agency must leave this paragraph (e)(17) blank if there is no second foster parent according to paragraph (e)(7) of this section.

(18) *Sex of second foster parent.* Indicate whether the second foster parent is ''female'' or ''male.''

(f) *Permanency planning*—(1) *Permanency plan.* Indicate each permanency plan established for the child. Indicate ''reunify with parent(s) or legal guardian(s)'' if the plan is to keep the child in out-of-home care for a limited time and the title IV–E agency is to work with the child's parent(s) or legal guardian(s) to establish a stable family environment. Indicate ''live with other relatives'' if the plan is for the child to live permanently with a relative(s) (by biological, legal or marital connection) who is not the child's parent(s) or legal guardian(s). Indicate ''adoption'' if the plan is to facilitate the child's adoption by relatives, foster parents, kin or other unrelated individuals. Indicate ''guardianship'' if the plan is to establish a new legal guardianship. Indicate ''planned permanent living arrangement'' if the plan is for the child to remain in foster care until the title IV–E agency's placement and care responsibility ends. The title IV–E agency must only select ''planned permanent living arrangement'' consistent with the requirements in section 475(5)(C)(i) of

the Act. Indicate ''permanency plan not established'' if a permanency plan has not yet been established.

(2) *Date of permanency plan.* Indicate the month, day and year that each permanency plan(s) was established during each out-of-home care episode.

(3) *Date of periodic review(s).* Enter the month, day and year of each periodic review, either by a court or by administrative review (as defined in section 475(6) of the Act) that meets the requirements of section 475(5)(B) of the Act.

(4) *Date of permanency hearing(s).* Enter the month, day and year of each permanency hearing held by a court or an administrative body appointed or approved by the court that meets the requirements of section 475(5)(C) of the Act.

(5) *Caseworker visit dates.* Enter each date in which a caseworker had an in-person, face-to-face visit with the child consistent with section 422(b)(17) of the Act. Indicate the month, day and year of each visit.

(6) *Caseworker visit locations.* Indicate the location of each in-person, face-to-face visit between the caseworker and the child. Indicate ''child's residence'' if the visit occurred at the location where the child is currently residing, such as the current foster care provider's home, child care institution or facility. Indicate ''other location'' if the visit occurred at any location other than where the child currently resides, such as the child's school, a court, a child welfare office or in the larger community.

(g) *General exit information.* Provide exit information for each out-of-home care episode. An exit occurs when the title IV–E agency's placement and care responsibility of the child ends.

(1) *Date of exit.* Indicate the month, day and year for each of the child's exits from out-of-home care. An exit occurs when the title IV–E agency's placement and care responsibility of the child ends. If the child has not exited out-of-home care the title IV–E agency must leave this paragraph (g)(1) blank. If this paragraph (g)(1) is applicable, paragraphs (g)(2) and (3) of this section must have a response.

(2) *Exit transaction date.* A non-modifiable, computer-generated date which accurately indicates the month, day and year each response to paragraph (g)(1) of this section was entered into the information system.

(3) *Exit reason.* Indicate the reason for each of the child's exits from out-of-home care. Indicate ''not applicable'' if the child has not exited out-of-home care. Indicate ''reunify with parent(s)/legal guardian(s)'' if the child was returned to his or her parent(s) or legal guardian(s) and the title IV–E agency no longer has placement and care responsibility. Indicate ''live with other relatives'' if the child exited to live with a relative (related by a biological, legal or marital connection) other than his or her parent(s) or legal guardian(s). Indicate ''adoption'' if the child was legally adopted. Indicate ''emancipation'' if the child exited care due to age. Indicate ''guardianship'' if the child exited due to a legal guardianship of the child. Indicate ''runaway or whereabouts unknown'' if the child ran away or the child's whereabouts were unknown at the time that the title IV–E agency's placement and care responsibility ends. Indicate ''death of child'' if the child died while in out-of-home care. Indicate ''transfer to another agency'' if placement and care responsibility for the child was transferred to another agency, either within or outside of the reporting state or tribal service area.

(4) *Transfer to another agency.* If the title IV–E agency indicated the child was transferred to another agency in paragraph (g)(3) of this section, indicate the type of agency that received placement and care responsibility for the child from the following options: ''State title IV–E agency,'' ''Tribal title IV–E agency,'' ''Indian tribe or tribal agency (non-IV–E),'' ''juvenile justice agency,'' ''mental health agency,'' ''other public agency'' or ''private agency.''

(h) *Exit to adoption and guardianship information.* Report information in this paragraph (h) only if the title IV–E agency indicated the child exited to adoption or legal guardianship in paragraph (g)(3) of this section. Otherwise the title IV–E agency must leave paragraphs (h)(1) through (15) of this section blank.

(1) *Marital status of the adoptive parent(s) or guardian(s).* Indicate the marital status of the adoptive parent(s) or legal guardian(s). Indicate ''married couple'' if the adoptive parents or legal guardians are considered united in matrimony according to applicable laws. Include common law marriage, where provided by applicable laws. Indicate ''married but individually adopting or obtaining legal guardianship'' if the adoptive parents or legal guardians are considered united in matrimony according to applicable laws, but are individually adopting or obtaining legal guardianship. Indicate ''separated'' if the foster parent is legally separated or is living apart from his or her spouse. Indicate ''unmarried couple'' if the adoptive parents or guardians are living together as a couple, but are not united in matrimony according to applicable laws. Use this response option even if only one person of the unmarried couple is the adoptive parent or legal guardian of the child. Indicate ''single adult'' if the adoptive parent or legal guardian is not married and is not living with another individual as part of a couple. If the response is ''married couple'' or ''unmarried couple,'' the title IV–E agency also must complete paragraphs for the second adoptive parent or second legal guardian in paragraphs (h)(8) through (12) of this section; otherwise the title IV–E agency must leave those paragraphs blank.

(2) *Child's relationship to the adoptive parent(s) or guardian(s).* Indicate the type of relationship between the child and his or her adoptive parent(s) or legal guardian(s). Indicate whether each relationship listed in paragraphs (h)(2)(i) through (iv) of this section ''applies'' or ''does not apply.''

(i) *Relative(s).* The adoptive parent(s) or legal guardian(s) is the child's relative (by biological, legal or marital connection).

(ii) *Kin.* The adoptive parent(s) or legal guardian(s) has a kin relationship with the child, as defined by the title IV–E agency, such as one where there is a psychological, cultural or emotional relationship between the child or the child's family and the adoptive parent(s) or legal guardian(s) and there is not a legal, biological, or marital connection between the child and foster parent.

(iii) *Non-relative(s).* The adoptive parent(s) or legal guardian(s) is not related to the child by biological, legal or marital connection.

(iv) *Foster parent(s).* The adoptive parent(s) or legal guardian(s) was the child's foster parent(s).

(3) *Date of birth of first adoptive parent or guardian.* Indicate the month, day and year of the birth of the first adoptive parent or legal guardian.

(4) *First adoptive parent or guardian tribal membership.* For state title IV–E agencies only: Indicate whether the first adoptive parent or guardian is a member of an Indian tribe. Indicate ''yes,'' ''no'' or ''unknown.''

(5) *Race of first adoptive parent or guardian.* In general, an individual's race is determined by the individual. Indicate whether each race category listed in paragraphs (h)(5)(i) through (vii) of this section applies with a ''yes'' or ''no.''

(i) *Race—American Indian or Alaska Native.* An American Indian or Alaska Native individual has origins in any of the original peoples of North or South America (including Central America),

and maintains tribal affiliation or community attachment.

(ii) *Race—Asian.* An Asian individual has origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand and Vietnam.

(iii) *Race—Black or African American.* A Black or African American individual has origins in any of the black racial groups of Africa.

(iv) *Race—Native Hawaiian or Other Pacific Islander.* A Native Hawaiian or Other Pacific Islander individual has origins in any of the original peoples of Hawaii, Guam, Samoa or other Pacific Islands.

(v) *Race—White.* A White individual has origins in any of the original peoples of Europe, the Middle East or North Africa.

(vi) *Race—Unknown.* The first adoptive parent or legal guardian does not know his or her race, or at least one race.

(vii) *Race—Declined.* The first adoptive parent, or legal guardian has declined to identify a race.

(6) *Hispanic or Latino ethnicity of first adoptive parent or guardian.* In general, an individual's ethnicity is determined by the individual. An individual is of Hispanic or Latino ethnicity if the individual is a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin, regardless of race. Indicate whether this category applies with a ''yes'' or ''no.'' If the first adoptive parent or legal guardian does not know his or her ethnicity, indicate ''unknown.'' If the individual refuses to identify his or her ethnicity, indicate ''declined.''

(7) *Sex of first adoptive parent or guardian.* Indicate whether the first adoptive parent is ''female'' or ''male.''

(8) *Date of birth of second adoptive parent, guardian, or other member of the couple.* Indicate the month, day and year of the date of birth of the second adoptive parent, legal guardian, or other member of the couple. The title IV–E agency must leave this paragraph (h)(8) blank if there is no second adoptive parent, legal guardian, or other member of the couple according to paragraph (h)(1) of this section.

(9) *Second adoptive parent, guardian, or other member of the couple tribal membership.* For state title IV–E agencies only: Indicate whether the second adoptive parent or guardian is a member of an Indian tribe. Indicate ''yes,'' ''no'' or ''unknown.''

(10) *Race of second adoptive parent, guardian, or other member of the couple.* In general, an individual's race is determined by the individual. Indicate whether each race category listed in paragraphs (h)(10)(i) through (vii) of this section applies with a ''yes'' or ''no.'' The title IV–E agency must leave this paragraph (h)(10) blank if there is no second adoptive parent, legal guardian, or other member of the couple according to paragraph (h)(1) of this section.

(i) *Race—American Indian or Alaska Native.* An American Indian or Alaska Native individual has origins in any of the original peoples of North or South America (including Central America), and maintains tribal affiliation or community attachment.

(ii) *Race—Asian.* An Asian individual has origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand and Vietnam.

(iii) *Race—Black or African American.* A Black or African American individual has origins in any of the black racial groups of Africa.

(iv) *Race—Native Hawaiian or Other Pacific Islander.* A Native Hawaiian or Other Pacific Islander individual has origins in any of the original peoples of Hawaii, Guam, Samoa or other Pacific Islands.

(v) *Race—White.* A White individual has origins in any of the original peoples of Europe, the Middle East or North Africa.

(vi) *Race—Unknown.* The second adoptive parent, legal guardian, or other member of the couple does not know his or her race, or at least one race.

(vii) *Race—Declined.* The second adoptive parent, legal guardian, or other member of the couple has declined to identify a race.

(11) *Hispanic or Latino ethnicity of second adoptive parent, guardian, or other member of the couple.* In general, an individual's ethnicity is determined by the individual. An individual is of Hispanic or Latino ethnicity if the individual is a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin, regardless of race. Indicate whether this category applies with a ''yes'' or ''no.'' If the second adoptive parent, legal guardian, or other member of the couple does not know his or her ethnicity, indicate ''unknown.'' If the individual refuses to identify his or her ethnicity, indicate ''declined.'' The title IV–E agency must leave this paragraph (h)(11) blank if there is no second adoptive parent, legal guardian, or other member of the couple according to paragraph (h)(1) of this section.

(12) *Sex of second adoptive parent, guardian, or other member of the couple.* Indicate whether the second adoptive parent, guardian, or other member of the couple is ''female'' or ''male.''

(13) *Inter/Intrajurisdictional adoption or guardianship.* Indicate whether the child was placed within the state or tribal service area, outside of the state or tribal service area or into another country for adoption or legal guardianship. Indicate ''interjurisdictional adoption or guardianship'' if the reporting title IV–E agency placed the child for adoption or legal guardianship outside of the state or tribal service area but within the United States. Indicate ''intercountry adoption or guardianship'' if the reporting title IV–E agency placed the child for adoption or legal guardianship outside of the United States. Indicate ''intrajurisdictional adoption or guardianship'' if the reporting title IV–E agency placed the child within the same state or tribal service area as the one with placing responsibility.

(14) *Assistance agreement type.* Indicate the type of assistance agreement between the title IV–E agency and the adoptive parent(s) or legal guardian(s): ''Title IV–E adoption assistance agreement''; ''State/tribal adoption assistance agreement''; ''Adoption-Title IV–E agreement non-recurring expenses only''; ''Adoption-Title IV–E agreement Medicaid only''; ''Title IV–E guardianship assistance agreement''; ''State/tribal guardianship assistance agreement''; or ''no agreement'' if there is no assistance agreement.

(15) *Siblings in adoptive or guardianship home.* Indicate the number of siblings of the child who are in the same adoptive or guardianship home as the child. A sibling to the child is his or her brother or sister by biological, legal, or marital connection. Do not include the child who is subject of this record in the total number. If the child does not have any siblings, the title IV–E agency must indicate ''not applicable.'' If the child has siblings, but they are not in the same adoptive or guardianship home as the child, the title IV–E agency must indicate ''0.''

■ 6. Amend § 1355.45 by revising paragraphs (b)(2) and (b)(3)(vi) and adding paragraph (f) to read as follows:

§ 1355.45 Adoption and guardianship assistance data file elements.

* * * * *

(b) * * *

(2) *Child's sex.* Indicate ''male'' or ''female.''

(3) * * *

(vi) *Race—Unknown.* The child or parent or legal guardian does not know the race, or at least one race of the child. This category does not apply when the child has been abandoned or the parents failed to return and the identity of the child, parent(s), or legal guardian(s) is known.

* * * * *

(f) *Adoption or guardianship placing agency.* Indicate the agency that placed the child for adoption or legal guardianship. Indicate ''title IV–E agency'' if the reporting title IV–E agency placed the child for adoption or legal guardianship. Indicate ''private agency under agreement'' if a private agency placed the child for adoption or legal guardianship through an agreement with the reporting title IV–E agency. Indicate ''Indian tribe under contract/agreement'' if an Indian tribe, tribal organization or consortia placed the child for adoption or legal guardianship through a contract or an agreement with the reporting title IV–E agency.

■ 7. Amend § 1355.46(c)(2) by revising the second sentence to read as follows:

§ 1355.46 Compliance.

* * * * *

(c) * * *

(2) * * * In addition, each record subject to compliance standards within the data file must have the data elements described in §§ 1355.44(a) and (b)(1) and (2) and 1355.45(a) and (b)(1) and (2) be 100 percent free of missing data, invalid data, and internally inconsistent data (see paragraphs (b)(1) through (3) of this section). * * *

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Part V

Nuclear Regulatory Commission

10 CFR Parts 50 and 52

Emergency Preparedness for Small Modular Reactors and Other New Technologies; Proposed Rule

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 50 and 52

[NRC–2015–0225]

RIN 3150–AJ68

Emergency Preparedness for Small Modular Reactors and Other New Technologies

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule and guidance; request for comment.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is proposing to amend its regulations to include new alternative emergency preparedness (EP) requirements for small modular reactors (SMRs) and other new technologies (ONTs), such as non-light-water reactors (non-LWRs) and certain non-power production or utilization facilities (NPUFs). The new EP requirements would acknowledge technological advancements and other differences from large LWRs that are inherent in SMRs and ONTs. Concurrently, the NRC is issuing for public comment draft Regulatory Guide (DG), DG–1350, ''Performance-Based Emergency Preparedness for Small Modular Reactors, Non-Light-Water Reactors, and Non-power Production or Utilization Facilities.'' The NRC plans to hold a public meeting to promote full understanding of the proposed rule and guidance and to facilitate public comment.

DATES: Submit comments by July 27, 2020. Comments received after this date will be considered if it is practical to do so, but the Commission is able to ensure consideration only for comments received before this date.

ADDRESSES: You may submit comments by any of the following methods (unless this document describes a different method for submitting comments on a specific subject):

- *Federal Rulemaking Website:* Go to *https://www.regulations.gov* and search for Docket ID NRC–2015–0225. Address questions about NRC dockets to Carol Gallagher; telephone: 301–415–3463; email: *Carol.Gallagher@nrc.gov.* For technical questions contact the individuals listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.
- *Email comments to: Rulemaking.Comments@nrc.gov.* If you do not receive an automatic email reply confirming receipt, then contact us at 301–415–1677.
- *Mail comments to:* Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, ATTN: Rulemakings and Adjudications Staff.

For additional direction on obtaining information and submitting comments, see ''Obtaining Information and Submitting Comments'' in the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Robert Beall, Office of Nuclear Material Safety and Safeguards; telephone: (301) 415–3874, email: *Robert.Beall@nrc.gov;* or Eric Schrader, Office of Nuclear Security and Incident Response; telephone: 301–287–3789; email: *Eric.Schrader@nrc.gov;* both are staff of the U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

SUPPLEMENTARY INFORMATION:

Executive Summary

A. Need for the Regulatory Action

The current EP requirements and guidance, initially developed for large light-water reactors (LWRs) and for non-power reactors, also referred to as research and test reactors (RTRs), as defined in part 50 of title 10 of the *Code of Federal Regulations* (10 CFR), ''Domestic Licensing of Production and Utilization Facilities,'' do not consider the advances in designs and safety research and their application to future operation of SMRs and ONTs. Through this proposed rule, the NRC is proposing to amend its regulations to create an alternative EP framework for SMRs and ONTs. The new alternative EP requirements and implementing guidance in DG–1350 would adopt a performance-based, technology-inclusive, risk-informed, and consequence-oriented approach. The new alternative EP requirements and guidance would adopt a scalable plume exposure pathway emergency planning zone (EPZ) approach and address ingestion response planning. The new alternative EP requirements and guidance would: (1) Continue to provide reasonable assurance that adequate protective measures can and will be implemented by an SMR or ONT licensee; (2) promote regulatory stability, predictability, and clarity; (3) reduce requests for exemptions from EP requirements; (4) recognize advances in design and technological advancements embedded in design features; (5) credit safety enhancements in evolutionary and passive systems; and (6) credit smaller sized reactors' and non-LWRs' potential benefits associated with postulated accidents, including slower transient response times, and relatively small and slow release of fission products. This proposed rule and guidance could affect existing SMR and non-LWR applicants and licensees as well as SMRs, non-LWRs, and NPUFs that would be licensed after the effective date of the final rule. Those applicants and licensees would have the option to develop a performance-based EP program as an alternative to using the existing, deterministic EP requirements in 10 CFR part 50. This proposed rule does not include within its scope emergency planning, preparation, or response for large LWRs, fuel cycle facilities,[1] or currently operating non-power reactors. For the purposes of this rule, large LWRs are reactors that are licensed to produce greater than 1,000 megawatts thermal (MWt) power.

B. Major Provisions

Major provisions of this proposed rule and guidance would include the addition of:

- A new alternative performance-based EP framework, including requirements for demonstrating effective response in drills and exercises for emergency and accident conditions;
- A hazard analysis of any NRC-licensed or non-licensed facility contiguous or nearby to an SMR or ONT, that considers any hazard that would adversely impact the implementation of emergency plans;
- A scalable approach for determining the size of the plume exposure pathway EPZ; and
- A requirement to describe ingestion response planning in the emergency plan, including the capabilities and resources available to prevent contaminated food and water from entering the ingestion pathway.

C. Costs and Benefits

The NRC prepared a draft regulatory analysis to determine the expected quantitative costs and benefits of this proposed rule and associated guidance as well as qualitative factors to be considered in the NRC's rulemaking decision. The conclusion from the analysis is that this proposed rule and associated guidance would result in net averted costs to the industry and the NRC ranging from $5.89 million using a 7-percent discount rate to $9.71 million using a 3-percent discount rate.

The draft regulatory analysis also considered qualitative aspects, such as greater regulatory stability, predictability, and clarity to the licensing process. These benefits would

[1] Emergency planning requirements for facilities licensed under 10 CFR part 70, ''Domestic Licensing of Special Nuclear Material,'' are set forth in § 70.22(i).

result from applicants and licensees not needing to use the exemption process to establish EP criteria commensurate with design- and site-specific considerations. Another qualitative consideration is promoting a performance-based regulatory framework that specifies requirements to be met and provides flexibility to an applicant or licensee regarding the information or approach needed to satisfy those requirements.

For more information, please see the draft regulatory analysis (available in the NRC's Agencywide Documents Access and Management System (ADAMS) Accession No. ML18134A077).

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I. Obtaining Information and Submitting Comments

A. Obtaining Information

Please refer to Docket ID NRC–2015–0225 when contacting the NRC about the availability of information for this action. You may obtain publicly-available information related to this action by any of the following methods:

- *Federal Rulemaking Website:* Go to *https://www.regulations.gov* and search for Docket ID NRC–2015–0225.
- *NRC's ADAMS:* You may obtain publicly-available documents online in the ADAMS Public Documents collection at *https://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*Begin Web-based ADAMS Search.*'' For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* For the convenience of the reader, instructions about obtaining materials referenced in this document are provided in section XVII, ''Availability of Documents.''
- *Attention:* The Public Document Room (PDR), where you may examine and order copies of public documents is currently closed. You may submit your request to the PDR via email at *pdr.resource@nrc.gov* or call 1–800–397–4209 between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays.

B. Submitting Comments

Please include Docket ID NRC–2015–0225 in your comment submission. To facilitate NRC review, please distinguish your comments between comments on the proposed rule and comments on the proposed guidance. The NRC cautions you not to include identifying or contact information that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at *https://www.regulations.gov* as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information. If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment into ADAMS.

II. Background

Current EP requirements and guidance, initially developed for large LWRs and non-power reactors, do not consider advances in designs and safety research and their applications to existing or future operation of SMRs and ONTs. Within the **SUPPLEMENTARY INFORMATION** section of this document, the NRC uses the term ''ONTs'' to refer to new technologies, such as non-LWRs and proposed medical radioisotope facilities that would be licensed under 10 CFR part 50. Further, within this document, the NRC uses the term ''existing'' or ''current'' when referring to existing applicants or licensees for an SMR or ONT facility. This proposed rule would also define ''non-power production or utilization facility'' to clarify the applicability of the proposed performance-based EP framework. As used in this proposed rule, the term ''non-power production or utilization facility'' would be defined to have the same meaning as the definition used in SECY–19–0062, ''Final Rule: Non-power Production or Utilization Facility License Renewal'' (ADAMS Accession No. ML18031A000), dated June 17, 2019.[2] The definition would include production or utilization facilities, licensed under § 50.21(a), § 50.21(c), or § 50.22, as applicable, that are not nuclear power reactors or production facilities as defined under paragraphs (1) and (2) of the definition of *Production facility* in § 50.2. In the context of this proposed rule, medical radioisotope facilities that would be licensed under 10 CFR part 50 would also be included within this definition of NPUF. The term ''non-power production or utilization facility'' is used in this proposed rule to distinguish between those medical radioisotope facilities that would be licensed as production or utilization facilities under 10 CFR part 50 and other facilities to be used for the production of medical radioisotopes that would be licensed under the regulations in 10 CFR parts 30, ''Rules of General Applicability to Domestic Licensing of Byproduct Material,'' 40, ''Domestic Licensing of Source Material,'' and 70, ''Domestic Licensing of Special Nuclear Material.'' Those facilities that would be licensed under 10 CFR parts 30, 40, or 70 would be covered by existing emergency planning requirements in those parts. Relevant 10 CFR part 70 fuel facility emergency planning considerations (*e.g.,* inadvertent criticality accidents and hazardous chemical exposures) applicable to 10 CFR part 50 production facilities have been incorporated into this proposed rule and associated draft guidance. As such, the scope of this proposed rule is limited to those ONT facilities (*i.e.,* non-LWRs and medical radioisotope facilities) for which the NRC expects to receive license applications under 10 CFR part 50 or 10 CFR part 52, ''Licenses, Certifications, and Approvals for Nuclear Power Plants.'' Therefore, those NPUFs that are not considered ONTs (*i.e.,* currently operating non-power reactors) are not within the scope of this proposed rule. Currently operating non-power reactors will continue to implement existing emergency planning requirements and guidance.

In the staff requirements memorandum (SRM) to SECY–15–0077, ''Options for Emergency Preparedness for Small Modular Reactors and Other New Technologies,'' dated August 4, 2015 (ADAMS Accession No. ML15216A492), the Commission approved the staff's recommendation to conduct rulemaking to address EP for SMRs and ONTs. In December 2016, the

[2] Any changes made to the definition of ''non-power production or utilization facility'' based on Commission direction will be reflected in the final rule on EP for SMRs and ONTs.

NRC developed and published ''NRC Vision and Strategy: Safely Achieving Effective and Efficient Non-Light Water Reactor Mission Readiness'' (ADAMS Accession No. ML16356A670), with a goal to further develop the NRC's non-LWR regulatory, technical, and policy infrastructure in order to be ready to efficiently and effectively review potential licensing applications for non-LWR technologies. This proposed rule contributes to the NRC's overall plan to optimize non-LWR regulatory readiness. In particular, the NRC's objective for this proposed rule is to create alternative EP requirements that would: (1) Continue to provide reasonable assurance that adequate protective measures can and will be implemented by an SMR or ONT licensee; (2) promote regulatory stability, predictability, and clarity; (3) reduce requests for exemptions from EP requirements; (4) recognize advances in design and technology advancements embedded in design features; (5) credit safety enhancements in evolutionary and passive systems; and (6) credit smaller sized reactors' and non-LWRs' potential benefits associated with postulated accidents, including slower transient response times, and relatively small and slow release of fission products.

A. Existing Emergency Preparedness Framework for Nuclear Power Reactors

Appendix E, ''Emergency Planning and Preparedness for Production and Utilization Facilities,'' to 10 CFR part 50 identifies the specific items required to be included in emergency plans. Additionally, the regulation in § 50.47, ''Emergency plans,'' provides EP requirements for nuclear power reactors, including planning standards for onsite and offsite emergency response plans. Other relevant regulations include paragraphs (q), (s), and (t) of § 50.54, ''Conditions of licenses.''

Large LWRs use a variety of guidance documents in support of EP programs. The two most notable guidance documents for the development and maintenance of emergency plans are: NUREG–0654/FEMA–REP–1, Rev.1, ''Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants'' (ADAMS Accession No. ML040420012), dated November 1980, which provides guidance and evaluation criteria for the development and evaluation of operating power reactors' and offsite response organizations' (OROs') radiological emergency response plans; and Regulatory Guide (RG) 1.219, Rev. 1, ''Guidance on Making Changes to Emergency Plans for Nuclear Power Reactors'' (ADAMS Accession No. ML16061A104), dated July 2016, which provides guidance for operating power reactor licensees implementing requirements in § 50.54(q) for evaluating and making changes to emergency plans.

This regulatory framework has defined the EP programs for large LWRs for several decades. These standards have been effectively used in practice and provided a basis to draw from in developing the proposed EP regulatory framework for SMRs and ONTs.

B. Existing Emergency Preparedness Framework for Non-Power Production or Utilization Facilities

The EP requirements applicable to a particular applicant or licensee can vary depending on the type of facility. In the August 19, 1980, EP final rule, ''Emergency Planning'' (45 FR 55402) (referred to herein as the ''1980 Final Rule''), the NRC established in appendix E to 10 CFR part 50 emergency planning requirements for RTRs that reflected the lower potential radiological hazards associated with these facilities. While RTRs and other NPUFs must meet the emergency planning requirements of §§ 50.34(a)(10) and (b)(6)(v) and 50.54(q) and appendix E to 10 CFR part 50, the requirements of § 50.47 do not apply to these facilities. Additionally, in section I.3. of appendix E to 10 CFR part 50, the NRC differentiates between emergency planning requirements for nuclear power reactors and other facilities, stating that the size of EPZs and the degree to which compliance with sections I through V of appendix E to 10 CFR part 50 is necessary will be determined on a case-by-case basis for facilities other than power reactors.

Further, footnote 2 of appendix E to 10 CFR part 50 provides that RG 2.6, ''Emergency Planning for Research and Test Reactors,'' will be used as guidance for the acceptability of RTR emergency response plans. Regulatory Guide 2.6 was initially issued in January 1979 (ADAMS Accession No. ML12184A008) and most recently updated to Revision 2, ''Emergency Planning for Research and Test Reactors and Other Non-power Production and Utilization Facilities,'' in September 2017 (ADAMS Accession No. ML17263A472). Consistent with the radiological risks associated with operating power levels between 5 watts thermal and 20 MWt for currently operating RTRs, RG 2.6, Revision 2 endorses the use of the source term and power-level based emergency planning guidance contained in American National Standards Institute (ANSI) and American Nuclear Society (ANS) standard ANSI/ANS–15.16–2015, ''Emergency Planning for Research Reactors.'' Similarly, RG 2.6, Revision 2 endorses the use of ANSI/ANS–15.16–2015 for other NPUFs. The ANSI/ANS–15.16, originally developed in 1982, and updated in 2008 and 2015, provides specific criteria and guidance for RTRs to comply with the applicable requirements set forth in §§ 50.34, ''Contents of applications; technical information,'' and 50.54, and appendix E to 10 CFR part 50.

In October 1983, the NRC issued NUREG–0849, ''Standard Review Plan for the Review and Evaluation of Emergency Plans for Research and Test Reactors'' (ADAMS Accession No. ML062190191). Consistent with ANSI/ANS–15.16, NUREG–0849 provides areas of review, planning standards, and evaluation items for the NRC to evaluate compliance with the applicable emergency planning requirements, previously described. Notably, the guidance contained in both ANSI/ANI–15.16 and NUREG–0849 addresses EPZs for RTRs ranging from the operations boundary to 800 meters from the operations boundary [3] for facilities up to 50 MWt. Both guidance documents state that the EPZs for facilities operating above 50 MWt are to be considered on a case-by-case basis. In addition to NUREG–0849 and ANSI/ANS–15.16, Section 12.7, ''Emergency Planning,'' of the non-power reactor standard review plan, NUREG–1537, Parts 1 and 2, ''Guidelines for Preparing and Reviewing Applications for the Licensing of Non-power Reactors'' (ADAMS Accession Nos. ML042430055 and ML042430048) and the Interim Staff Guidance augmenting NUREG–1537, Parts 1 and 2, for the licensing of radioisotope production facilities and aqueous homogeneous reactors (ADAMS Accession Nos. ML12156A069 and ML12156A075) provide additional emergency planning considerations for NPUFs. For example, relevant radioisotope production facility emergency planning considerations (*e.g.,* hazardous chemicals) contained in the Interim Staff Guidance augmenting NUREG–1537 are based on NUREG–1520, Revision 1, ''Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility'' (ADAMS Accession No. ML101390110).

These criteria and guidance provide a basis for NPUF applicants and licensees to develop acceptable emergency

[3] As defined in ANSI/ANS–15.16–2015, ''operations boundary'' refers to the area within the site boundary such as the reactor building (or the nearest physical personnel barrier in cases where the reactor building is not a principal physical personnel barrier) where the reactor chief administrator has direct authority over all activities.

response plans for their facilities. This existing regulatory framework for EP at NPUFs provides the planning necessary to reflect the lower potential radiological hazards associated with the operation of these facilities compared to large LWRs. These EP standards provide a basis for developing the consequence-oriented approach to establishing EPZs and the planning commensurate with the radiological risk.

C. Evolution of the Emergency Preparedness Regulatory Framework for Small Modular Reactors and Other New Technologies

The use and regulation of small reactors and other advanced reactor designs have been active topics of discussion between the NRC and the nuclear reactor industry for more than 30 years. The NRC has worked with stakeholders to develop an initial framework for the implementation of performance-based EP regulations and licensing of non-LWR designs, culminating in the current EP rulemaking activities. This section describes the history of small and advanced reactor designs that led to this proposed rule.

Emerging Interest in Advanced Nuclear Reactor Technology

Concurrent with large LWR deployment and design evolution, the United States and other countries have developed and promoted several different reactor designs that are either light-water SMRs with passive safety features or reactors that do not use light-water as a coolant. This latter category is commonly referred to as non-LWR technology. Advanced designs using non-LWR technology include liquid-metal-cooled reactors, gas-cooled reactors, and molten-salt-cooled reactors. These advanced designs' rated thermal power could range from low to very high and may apply modular construction concepts.

As advanced reactor technology evolved in the 1980s and early 1990s, the NRC considered the prospect of a regulatory regime for these emerging technologies. On July 8, 1986, the Commission issued a policy statement, ''Regulation of Advanced Nuclear Power Plants, Statement of Policy'' (51 FR 24643), outlining the Commission's early thoughts on the regulation of advanced reactor designs. In the policy statement, the Commission provided a high-level framework for the review and consideration of advanced reactor designs. Following issuance of the policy statement, the NRC published NUREG–1226, ''Development and Utilization of the NRC Policy Statement on the Regulation of Advanced Nuclear Power Plants'' (ADAMS Accession No. ML13253A431) in June 1988 to provide guidance on developing new regulatory requirements to support advanced reactor designs. With the issuance of this initial guidance came questions concerning EP requirements for such designs.

In response, the NRC staff stated in SECY–93–092, ''Issues Pertaining to the Advanced Reactor (PRISM, MHTGR, and PIUS) and CANDU 3 Designs and Their Relationship to Current Regulatory Requirements'' [4] (ADAMS Accession No. ML040210725), dated April 8, 1993, that no change to existing EP regulations for advanced reactors was currently needed. The NRC staff noted that regulatory direction would be given at or before the start of the design certification phase of advanced reactors so that design implications for EP could be addressed in the licensing process.

The Commission agreed, and stated in the SRM (ADAMS Accession No. ML003760774) for SECY–93–092, dated July 30, 1993, that it was premature to reach a conclusion on EP for advanced reactors and that existing regulatory requirements should be used for ongoing review processes. However, the Commission directed that:

> [T]he staff should remain open to suggestions to simplify the emergency planning requirements for reactors that are designed with greater safety margins. To that end, the staff should submit to the Commission recommendations for proposed technical criteria and methods to use to justify simplification of existing emergency planning requirements.

In response to the Commission's direction, the NRC performed an evaluation to develop technical criteria and methods for EP for evolutionary and advanced reactor designs. The evaluation focused on evolutionary and passive advanced LWR designs due to the availability of design and risk assessment data and because applicants were pursuing certification of these designs. In SECY–97–020, ''Results of Evaluation of Emergency Planning for Evolutionary and Advanced Reactors'' (ADAMS Accession No. ML992920024), dated January 27, 1997, the NRC staff determined that the rationale upon which EP for current reactor designs is based, that is, potential consequences from a spectrum of accidents, is appropriate for use as the basis for EP for evolutionary and passive advanced LWR designs and is consistent with the Commission's defense-in-depth safety philosophy.

In the early 2000s, performance-based EP became an important component of LWR licensing and relicensing discussions. As part of an EP exemption request review, in SECY–04–0236, ''Southern Nuclear Operating Company's Proposal to Establish a Common Emergency Operating Facility at its Corporate Headquarters,'' dated December 23, 2004 (ADAMS Accession No. ML042590576), the NRC staff noted the following:

> [A]s part of the top-down review of Emergency Preparedness, the staff has identified 10 CFR 50 Appendix E section E.8 and 10 CFR 50.47(b)(3) as opportunities to enhance the emergency preparedness regulatory structure. The staff will propose rulemaking to remove ''near-site'' from the regulations, as a more performance based requirement is appropriate. . . .

The Commission agreed, highlighting the potential value of performance-based EP for LWRs in the SRM (ADAMS Accession No. ML050550131) for SECY–04–0236, dated February 23, 2005. The Commission directed that:

> The staff should consider revising 10 CFR part 50 to make the requirements for EOFs [emergency operations facilities] more performance-based to allow other multi-plant licensees to consolidate their EOFs, if those licensees can demonstrate their emergency response strategies will adequately cope with an emergency at any of the associated plants.

In this decision, the Commission allowed for the development of a performance-based EP requirement.

In SECY–06–0200, ''Results of the Review of Emergency Preparedness Regulations and Guidance,'' dated September 20, 2006 (ADAMS Accession No. ML061910707), the staff sought Commission approval to explore the feasibility of a voluntary, performance-based EP regulatory regimen. Specifically, the staff stated:

> [A]s the EP program has matured and industry performance has improved, the staff recognized the benefits of a performance-based regulatory structure. Thus, the staff is proposing a new voluntary performance-based regulatory regimen. The staff has conceptualized the basis for a voluntary performance-based EP regulatory regimen. . . . This regimen could be adopted in lieu of the existing EP regulations contained in 10 CFR part 50. The current regimen tends to emphasize compliance with, and control over, emergency plans and facilities. The performance-based regimen would focus licensee efforts on actual performance competencies, rather than control of emergency plans and procedures. Regulatory oversight would focus on licensee performance, instead of licensee processes and procedures. Creating a performance-based EP regulatory regimen could achieve a

[4] ''PRISM,'' ''MHTGR,'' ''PIUS,'' and ''CANDU'' are abbreviations for Power Reactor Innovative Small Module, Modular High-Temperature Gas-Cooled Reactor, Process Inherent Ultimate Safety, and CANadian Deuterium-Uranium, respectively.

higher level of preparedness, as the regimen would focus on results and abilities rather than on means. The performance-based regimen would provide the NRC with enhanced oversight of the actual competencies important to protection of public health and safety while allowing licensees increased flexibility.

In SECY–06–0200, the staff also outlined several high-level performance-based concepts for large LWRs related to performance goals, staffing, and performance indicators (PIs). In the SRM (ADAMS Accession No. ML070080411) for SECY–06–0200, dated January 8, 2007, the Commission approved the NRC staff's recommendation for the development of a rulemaking plan and guidance changes to enhance EP regulations and guidance. The Commission also approved the staff's request to begin activities to explore a voluntary performance-based EP regulatory concept.

During the early development of a performance-based EP regulatory concept, the NRC published a ''Policy Statement on the Regulation of Advanced Reactors,'' dated October 14, 2008 (73 FR 60612). The policy statement expressed the Commission's expectation that advanced reactor designers would ensure that security and emergency response are considered alongside safety during the early stages of plant design.

By 2014, the NRC had finalized its study and review of the potential to enhance the oversight of performance-based nuclear power plant EP programs as directed in the SRM for SECY–06–0200. In SECY–14–0038, ''Performance-Based Framework for Nuclear Power Plant Emergency Preparedness Oversight'' (ADAMS Accession No. ML13238A018), dated April 4, 2014, the NRC staff stated:

> A systematic review and revision of EP requirements to employ a more performance-based oversight regimen (regulation, inspection, and enforcement) has the potential to enhance many aspects of emergency response and oversight. A performance-based oversight regimen could simplify EP regulations and focus inspection more fully on response-related performance rather than the current focus on plan maintenance and compliance.

Although the NRC staff asserted that the performance-based framework would simplify EP regulations and focus inspections more on response-related performance, the NRC staff recommended that the existing framework continue to be used with operating plants because changing the EP approach for those plants would require significant resources for implementing a performance-based framework and could introduce regulatory uncertainty. Additionally, the NRC staff recognized that existing EP programs provided reasonable assurance of adequate protection of public health and safety and therefore recommended maintaining the current EP regimen.

In the SRM (ADAMS Accession No. ML14259A589) to SECY–14–0038, dated September 16, 2014, the Commission directed that:

> The staff should be vigilant in continuing to assess the NRC's emergency preparedness program and should not rule out the possibility of moving to a performance-based framework in the future. The Commission notes the potential benefit of a performance-based emergency preparedness regimen for small modular reactors, and the staff should return to the Commission if it finds that conditions warrant rulemaking.

Approach to Emergency Preparedness for Small Modular Reactors and Other New Technologies

In the late 2000s, the discussion of modernizing EP and developing alternative performance-based requirements for LWRs merged with the NRC's ongoing discussions of advanced reactor designs. By this time, several advanced reactor designs were under discussion in the U.S., including the U.S. Department of Energy's (DOE's) Next Generation Nuclear Plant and SMR programs, and by private sector companies seeking to introduce an alternative to large LWRs. By 2010, the NRC began considering the possibility of developing a performance-based approach to EP for SMRs and ONTs. In SECY–10–0034, ''Potential Policy, Licensing, and Key Technical Issues for Small Modular Nuclear Reactor Designs,'' issued on March 28, 2010 (ADAMS Accession No. ML093290268), the NRC staff identified EP as a key technical issue for the licensing of SMRs and other advanced reactor designs. The enclosure to the SECY stated that resolution of offsite EP requirements would be of interest to the Federal Emergency Management Agency (FEMA) and the public, as well as to applicants trying to support their business case at the design certification stage.

Contemporaneous with the issuance of SECY–10–0034, the NRC held a series of public meetings with other Federal agencies, industry leaders, and key stakeholders to discuss potential policy, licensing, and technical issues associated with advanced reactor designs. Additional information on these meetings can be found in the summaries for the October 8–9, 2009 and July 28, 2010 meetings (ADAMS Accession Nos. ML092940138 and ML102380209 respectively). Discussions included the proposed framework of potential EP requirements. Emergency preparedness was a significant policy issue for SMR designers because SMR designs may have reduced accident consequences offsite per module, potentially forming the basis for smaller EPZs relative to large LWRs.

The NRC staff discussed the public's input from those meetings in SECY–11–0152, ''Development of an Emergency Planning and Preparedness Framework for Small Modular Reactors'' on October 28, 2011 (ADAMS Accession No. ML112570439). The paper informed the Commission of the NRC staff's proposed actions to develop an emergency planning and preparedness framework for SMR facilities. In the document, the NRC staff stated its intent to develop a technology-neutral, dose-based, consequence-oriented EP framework for SMR sites that would take into account the various designs, modularity, and collocation of these facilities, as well as the size of the EPZs. The staff also stated that ''[t]he staff will work with stakeholders to develop general guidance on calculating the offsite dose, and is anticipating that the industry will develop and implement the detailed calculation method for review and approval by the staff.''

In response to SECY–11–0152, the Nuclear Energy Institute (NEI) prepared a white paper to provide perspective to the NRC and SMR developers in establishing SMR-appropriate EPZs. In the ''White Paper on Proposed Methodology and Criteria for Establishing the Technical Basis for Small Modular Reactor Emergency Planning Zone,'' submitted in December 2013 (ADAMS Accession No. ML13364A345), NEI noted the NRC expectation in SECY–11–0152 that SMR license applicants will provide a well-justified technical basis for NRC's review and consideration. The 2013 White Paper was designed to ''discuss a generic methodology and criteria that can be adopted and used by the SMR developers and plant operating license applicants for establishing the design-specific and site-specific technical basis for SMR-appropriate EPZs.'' In the paper, NEI stated that the intent of the paper was to ''serve as a vehicle to support the continuing dialogue with the staff that should result in a mutually agreeable methodology and criteria, and thus provide the SMR developers and applicants sufficient guidance as they proceed to develop their design-specific and site-specific technical basis.'' As

stated in the paper, NEI's approach was rooted in the following:

(1) The expectation of enhanced safety inherent in the design of SMRs (*e.g.,* increased safety margin, reduced risk, smaller and slower fission product accident release, and reduced potential for dose consequences to population in the vicinity of the plant); (2) the applicable SECY–11–0152 concepts including utilization of existing emergency preparedness regulatory framework and dose savings criteria of NUREG–0396; and (3) the significant body of risk information available to inform the technical basis for SMR-appropriate EPZ, including severe accident information developed since NUREG–0396 was published in 1978, and information from the design-specific and plant-specific probabilistic risk assessments (PRAs) which will support SMR design and licensing.

The NEI 2013 White Paper addressed only SMRs with light-water-cooled and moderated designs and the plume exposure pathway EPZ. It did not address other designs or the ingestion pathway EPZ (IPZ). The NRC has reviewed the White Paper and has discussed the development of the regulatory framework with NEI and stakeholders; however, the NRC has not endorsed the paper.

In the enclosure to SECY–10–0034, the NRC staff stated, ''Should it be necessary, the staff will propose changes to existing regulatory requirements and guidance or develop new guidance concerning reduction of offsite emergency preparedness for SMRs in a timeframe consistent with the licensing schedule.'' In 2015, the NRC determined that SMR EP issues were a key concern for potential SMR and ONT applicants, and that addressing those issues would enhance regulatory predictability for both applicants and the NRC. In May 2015, the NRC staff sought Commission approval to initiate rulemaking to revise the EP regulations and guidance for SMRs and ONTs. In SECY–15–0077, ''Options for Emergency Preparedness for Small Modular Reactors and Other New Technologies'' (ADAMS Accession No. ML15037A176), dated May 29, 2015, the NRC staff proposed a consequence-oriented approach to establishing EP requirements commensurate with the potential consequences to public health and safety and the common defense and security at SMR and ONT facilities. The NRC staff stated that the need for EP is based on the projected offsite dose in the unlikely occurrence of a severe accident. In SRM–SECY–15–0077, the Commission approved the staff's recommendation to proceed with rulemaking, keeping a performance-based framework in mind as previously directed in SRM–SECY–14–0038. The Commission further directed that, for any SMR reviews conducted prior to the establishment of a regulation, the staff should be prepared to adapt an approach to EPZs for SMRs under the existing exemption process.

In June 2015, NEI issued a White Paper supporting the NRC proposal in SECY–15–0077 and recommending the revision of EP regulations and guidance for SMR facilities. In ''White Paper: Proposed Emergency Preparedness Regulations and Guidance for Small Modular Reactors Facilities'' (ADAMS Accession No. ML15194A276), dated July 2015, NEI provided proposed revisions to the planning standards set forth in § 50.47 and appendix E to 10 CFR part 50 as well as associated EP guidance. The proposed revisions were developed by NEI to ''constructively inform the staff's deliberations concerning the development of an SMR EP framework, and serve as a basis for future public meeting engagement.'' The NRC staff has considered NEI's recommendations in the development of this proposed rule.

In addition to the NEI white papers, the NRC staff has had several interactions with the public concerning licensing issues related to SMRs and ONTs, including DOE–NRC Workshops on Advanced Non-Light-Water Reactors held on September 1–2, 2015 and June 7–8, 2016. The NRC staff held these workshops to obtain stakeholder feedback regarding the proposed rule and inform the public on the proposed approach. Additional information on these workshops may be found in the summaries available at ADAMS Accession Nos. ML15265A165 and ML16188A226.

Rulemaking Activity

In response to SRM for SECY–15–0077, on May 31, 2016, the NRC staff submitted a rulemaking plan to the Commission (SECY–16–0069, ''Rulemaking Plan on Emergency Preparedness for Small Modular Reactors and Other New Technologies'' (ADAMS Accession No. ML16020A388)) to propose rulemaking to address EP for SMRs and ONTs. In SECY–16–0069, the staff provided a proposed rulemaking schedule, outlining the need to develop EP requirements for SMRs and ONTs commensurate with the potential consequences to public health and safety posed by these facilities. On June 22, 2016, the Commission approved the staff's rulemaking plan in SRM–SECY–16–0069 (ADAMS Accession No. ML16174A166).

On August 22, 2016, the NRC staff held a Category 3 public meeting to request feedback from interested stakeholders on a potential performance-based approach for EP for SMRs and ONTs. The participants supported a performance-based approach for EP, indicating that it would be more effective because it would focus on achieving desired outcomes. Participants also favored the performance-based approach because it would allow for innovation and flexibility in addressing the EP requirements. The potential need for an entire new suite of guidance documents, including the process by which licensees make changes to their emergency plans (*i.e.,* change process), was the only disadvantage identified by participants as it would require additional up-front work to reflect the new approach. Additional information about this public meeting is detailed in the meeting summary (ADAMS Accession No. ML16257A510). After considering the feedback received from the stakeholders in support of the performance-based approach to EP, the NRC staff developed a draft regulatory basis that included an option to proceed with rulemaking to implement this approach.

On April 13, 2017, the NRC issued a draft regulatory basis for a 75-day public comment period (82 FR 17768). In the draft regulatory basis, the NRC requested feedback from the public on questions related to the scope of the draft regulatory basis, performance-based approach, regulatory impacts, and cumulative effects of regulation (CER). In addition, the NRC held a public meeting on May 10, 2017, to discuss the draft regulatory basis with interested stakeholders. Additional information about this public meeting is detailed in the meeting summary (ADAMS Accession No. ML16257A510).

The NRC received 57 comment submissions on the draft regulatory basis and the associated regulatory analysis, which contained 223 individual comments related to EP. The commenters included individuals, environmental groups, industry groups, a Native American Tribal organization, States, and FEMA. The NRC reviewed all comments submitted on the draft regulatory basis, grouped the comments into categories by comment topic, and developed a resolution for each topic. Comments included topics such as: Consequence-based approach, co-location, dose assessment, EPZ and offsite EP, general rulemaking approach, siting of multi-module facilities, performance-based approach, regulatory analysis, scope of the draft regulatory basis, safety, and technology-inclusive approach. The NRC considered those

comment submissions and discussions from the public meeting as it finalized the regulatory basis. The NRC published a notice in the **Federal Register** announcing the public availability of the regulatory basis on November 15, 2017 (82 FR 52862).

III. Discussion

Objective and Applicability

The NRC's objective for this rulemaking is to create alternative EP requirements that would: (1) Continue to provide reasonable assurance that adequate protective measures can and will be implemented by an SMR or ONT licensee; (2) promote regulatory stability, predictability, and clarity; (3) reduce requests for exemptions from EP requirements; (4) recognize advances in design and technology advancements embedded in design features; (5) credit safety enhancements in evolutionary and passive systems; and (6) credit smaller sized reactors' and non-LWRs' potential benefits associated with postulated accidents, including slower transient response times, and relatively small and slow release of fission products. This proposed rule would apply to existing and future SMR and ONT facilities. These applicants and licensees would have the option to develop a performance-based EP program designed for SMRs and ONTs, as an alternative to complying with the existing, deterministic EP requirements in 10 CFR part 50. This proposed rule does not include within its scope emergency planning, preparation, and response for large LWRs, which for the purposes of this proposed rule are those LWRs that are licensed to produce greater than 1,000 MWt power; fuel cycle facilities; or currently operating non-power reactors.

In SRM–SECY–15–0077, the Commission approved the staff's recommendation to conduct rulemaking for SMRs and ONTs, including non-LWRs and medical radioisotope facilities. The current operating fleet of power reactors has an established EP regulatory framework under § 50.47 and appendix E to 10 CFR part 50. Emergency planning requirements for facilities licensed under 10 CFR part 70 are set forth in § 70.22(i). The NRC established in appendix E to 10 CFR part 50 emergency planning requirements for RTRs that reflect the lower potential radiological hazards associated with these facilities.

The plume exposure pathway EPZ for the current operating fleet of nuclear power reactors consists of an area about 10 miles (16 km) in radius and the IPZ for such facilities consists of an area about 50 miles (80 km) in radius. See §§ 50.33(g) and 50.47(c). As discussed in the ''Background'' section of this document, in the early 2000s, the NRC anticipated that future SMR and ONT applications would reflect a wide range of potential designs that have smaller source terms and incorporate EP considerations as part of the design. The Commission Policy Statement on the Regulation of Advanced Reactors (73 FR 60612) stated that the Commission ''expects that advanced reactors will provide enhanced margins of safety and/or use simplified, inherent, passive, or other innovative means to accomplish their safety and security functions.'' Under the current EP framework, §§ 50.33(g) and 50.47(c)(2) provide that the size of plume exposure pathway EPZs and IPZs for gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 MWt may be determined on a case-by-case basis. Section I.3 of appendix E to 10 CFR part 50 states that the EPZs for facilities other than power reactors may also be determined on a case-by-case basis. In addition, applicants and licensees for power reactors may also request that the size of the EPZs and IPZs for their facilities be determined on a case-by-case basis by seeking an exemption under § 50.12, ''Specific exemptions,'' from the requirements in § 50.47(c)(2) regardless of authorized power level. Furthermore, appendix E to 10 CFR part 50, provides the flexibility to determine other emergency planning considerations, such as organization, assessment actions, activation of emergency organization, emergency facilities, and equipment, on a case-by-case basis for certain facilities.

The NRC initiated this proposed rule to seek a wide-range of public views and increase regulatory predictability and flexibility in the development of an alternative, generic approach that designers, vendors, and applicants may use to determine the appropriate EP requirements for SMRs and ONTs, for which emergency planning may otherwise be addressed on a case-by-case basis. In particular, this proposed rule would provide additional predictability and flexibility for advanced reactor developers that use simplified or other innovative means to accomplish their safety functions and provide enhanced margins of safety. Large LWRs were not included by the NRC in the scope of this proposed rule because an EP licensing framework already exists for those reactors, and licensees for those plants have not expressed a clear interest in changing that framework.

For clarity, this proposed rule would define the different types of affected facilities. The NRC would amend § 50.2 to include the terms ''small modular reactor,'' ''non-light-water reactor,'' and ''non-power production or utilization facility.'' In developing the proposed definition for ''small modular reactor,'' the NRC referred to a variety of existing definitions and policy documents. The following discussion describes these sources of information in more detail.

In this proposed rule, the NRC has included a definition of ''non-light-water reactor'' to cover other new technologies, including liquid-metal-cooled reactors, gas-cooled reactors, and molten-salt-cooled reactors. Having a separate definition for these non-LWR technologies would clarify the applicability of the existing EP standards and requirements in 10 CFR part 50, which are specific to LWRs, and would maintain consistency between this proposed rule and the ''Variable Annual Fee Structure for Small Modular Reactors'' final rule (81 FR 32617; May 24, 2016) (referred to herein as the ''SMR Fee Rule'').

The NRC has evaluated the suitability of using the existing definition of ''small modular reactor'' in § 171.5, ''Definitions'' for the purposes of this EP proposed rule. The § 171.5 definition of ''small modular reactor'' means, for the purpose of calculating fees, the class of light-water power reactors having a licensed thermal power rating less than or equal to 1,000 MWt per module. This rating is based on the thermal power equivalent of a light-water SMR with an electrical power generating capacity of 300 megawatts electrical or less per module. Although similar, this proposed rule's definition of ''small modular reactor'' does not include reference to electrical power generating capacity. For the fee-related regulations in 10 CFR part 171, the NRC determined that using the thermal power equivalent of electric power generating capacity would be fair because SMRs should pay annual fees that are commensurate with the economic benefit received from their license (81 FR 32617, 32623). Because electrical generating power capacity is not a criterion the NRC uses to determine EP requirements, this proposed rule's definition would focus on thermal power rating.

Need for Changes to Existing Regulatory Framework

As mentioned in the ''Background'' section of this document, in SECY–10–0034, the NRC identified potential policy and licensing issues for SMRs based on the preliminary design information supplied in pre-application

interactions and discussions with SMR designers and the DOE. In general, these issues result from the key differences between the new designs and the current-generation large LWRs, such as rated thermal power, moderator, coolant, and fuel design. In SECY–10–0034, the NRC described designs discussed in pre-application interactions with DOE and SMR designers. The rated thermal power of these designs ranged from 30 MWt to 1,000 MWt. The designs included the use of helium gas, sodium, and light-water as coolants. While some SMR designs employ conventional LWR radiological barrier designs, some designs may employ a non-traditional containment approach.

In addition to licensing issues associated with differences in designs, some of the licensing issues resulted from industry-proposed review approaches and industry-proposed modifications to current policies and practices, including standard review plans and design-specific review standards. The potential for smaller reactor core sizes, lower power densities, lower probability of severe accidents, slower accident progression, and smaller accident offsite consequences per module that characterize some SMR designs have led DOE, SMR designers, and potential operators to revisit the determination of the appropriate size of the EPZs, the extent of onsite and offsite emergency planning, and the number of onsite response staff needed.

Historically, licensees of small reactors have requested exemptions from EP regulations because those EP requirements would have imposed a regulatory burden on the applicants that was not necessary to protect the public health and safety due to the facilities' designs. The NRC anticipates that existing or future SMR and ONT applicants could also have designs that differ substantially from the existing fleet of large LWRs. These applicants could also request exemptions from EP requirements that are potentially unnecessary to protect the public health and safety. Although the exemption process provides the flexibility to address these existing or future applicants, regulating by exemption generally provides little opportunity for public engagement in the exemption process and can lead to undue burden for applicants, licensees, and the NRC stemming from the applicant- or licensee-specific nature of exemption requests.

This proposed rule would create a transparent alternative EP regulatory framework for SMR and ONT applicants and licensees that would continue to provide reasonable assurance that adequate protective measures can and will be implemented in a radiological emergency. The proposed alternative EP requirements would consider a wide-range of views and acknowledge technological advancements and other differences from large LWRs inherent in SMRs and ONTs and reduce regulatory burden by precluding the need for exemptions from EP requirements as applicants request permits and licenses. This proposed rule would also support the principles of good regulation, including openness, clarity, and reliability.

Proposed Changes

Technical Basis

The NRC is proposing a performance-based, technology-inclusive, risk-informed, and consequence-oriented alternative approach to EP for SMRs and ONTs. These approaches form the basis for the NRC's proposed rule, and the following discussion addresses the technical basis for each.

Performance-Based Approach

The NRC's current regulatory framework for EP in 10 CFR part 50 requires that site-specific emergency plans be developed and maintained in compliance with 16 planning standards and supporting regulatory guidance for nuclear power reactors. This deterministic structure does not provide performance standards, but the regulations and guidance for emergency response organizations (EROs) emphasize requirements for emergency plans and facilities. The existing EP requirements for large LWRs are based on decades of research on the risks posed by these facilities. The risks for these facilities are well understood, and, as such, a deterministic approach to regulating EP is an effective method for providing reasonable assurance that protective actions can and will be taken in a radiological emergency.

The NRC anticipates that existing and future SMR and ONT applications will reflect a wide range of potential designs and source terms. Because the technology for certain SMR and ONT designs is still evolving, a performance-based approach could allow for more regulatory flexibility, provide a basis for appropriate EP through review of design- and site-specific accident scenarios, and minimize the need for exemption requests that would otherwise be anticipated under a prescriptive regulatory framework. In this context, a performance-based approach bases the adequacy of EP upon the NRC's identification of emergency response functions that affect the protection of public health and safety and the licensee's successful execution of those functions. The NRC's proposed performance-based framework, inspection and enforcement program, and design-specific review process would provide reasonable assurance that protective actions can and will be taken in the event of an emergency at an SMR or ONT facility. The NRC has previously explored the idea of a performance-based EP framework, as discussed in the ''Performance-Based Emergency Preparedness'' section of this document, and the Commission noted that a performance-based approach was a potential benefit to regulating EP for SMRs. The performance-based approach could simplify EP regulations and focus inspections more fully on response-related performance. A graded approach to EP was also considered, which would take into account the magnitude of any credible hazard involved, the particular characteristics and status of a facility, and the balance between radiological and non-radiological hazards. A graded approach to EP has a longstanding regulatory history. The 16 EP planning standards for nuclear power reactors, outlined in § 50.47(b), and the associated evaluation criteria in NUREG–0654/FEMA–REP–1, Revision 1, are one part of a continuum of planning standards for radiological EP. The existing regulations in § 50.47(c)(2) for EPZ size determinations for gas-cooled reactors and reactors with power levels less than 250 MW(t), the EP regulations for production and utilization facilities other than nuclear power reactors in appendix E to 10 CFR part 50, and the EP regulations for fuel cycle facilities in § 70.22(i) and independent spent fuel storage installations (ISFSIs) in § 72.32, ''Emergency Plan,'' are also part of a graded approach to EP that is commensurate with the relative radiological risk, source term, and potential hazards, among other considerations.

Technology-Inclusive Approach

As previously mentioned, the NRC has licensed, reviewed, or had pre-application discussions with stakeholders supporting a range of technology types that are included in the scope of this proposed rule. Based on the information currently available to the NRC, unique design considerations (*e.g.,* passive safety characteristics, advanced fuel types, and chemical processes) and the potential for multi-module facilities and siting contiguous

with, or nearby to, NRC-licensed or non-licensed facilities could lead to a variety of accident frequencies, progression times, and potential consequences for SMRs or ONTs. To incorporate recent and potential existing or future technology advancements and reduce the need for future EP rulemaking, the NRC is therefore proposing a technology-inclusive approach to EP for SMRs and ONTs. In this context, technology-inclusive means the establishment of performance requirements for any SMR or ONT applicant or licensee to use in its emergency plan.

As described further in the ''Performance-Based Framework'' section of this document, the NRC's proposed alternative framework for SMRs and ONTs consists of two major elements—an EPZ size determination process and a set of performance-based requirements. The size of an EPZ determined by this process is scalable based on factors such as accident source term, fission product release, and associated dose characteristics, and the same process can be applied to all SMR and ONT designs. Further, the performance-based requirements in proposed § 50.160, ''Emergency preparedness for small modular reactors, non-light-water reactors, and non-power production or utilization facilities,'' do not contain any technology-specific language. Rather, applicants and licensees would demonstrate how they meet the EP performance-based framework based on their design- and site-specific considerations through the implementation of a performance objective scheme and the conduct of drills and exercises.

Risk-Informed and Consequence-Oriented Approaches to Emergency Planning

The NRC is proposing a consequence-oriented approach to establish EP requirements for SMRs and ONTs. In this context, consequence-oriented means the principle of basing decisions of the extent of EP required upon the level and severity of the consequences of a credible radiological accident. The decisions regarding EP should be based upon projected offsite dose from such accidents and the pre-determined plume exposure pathway EPZ for pre-planned protective actions. Emergency preparedness is risk-informed rather than risk-based, and therefore emergency planning is independent of accident probability.

The NRC has reviewed the current EP requirements associated with various nuclear facilities, including large and small operating reactors, material facilities, fuel facilities, ISFSIs, NPUFs, and decommissioning large LWRs (including SECY–18–0055, ''Proposed Rule: Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning'' (ADAMS Accession No. ML18012A019), dated May 22, 2018). This review identified that all of the existing types of NRC-licensed nuclear facilities use a consequence-oriented approach and take into account other considerations to establish the boundary of the plume exposure pathway EPZ (or other planning area). The consequence or dose considerations are based on the U.S. Environmental Protection Agency (EPA) early-phase Protective Action Guides (PAGs) (EPA–520/1–75–001), issued in September 1975. The PAGs were revised and republished as EPA–400–R–92–001 in May 1992, and a subsequent revision, EPA–400/R–17/001, was issued in January 2017. A similar consequence-oriented rationale also would be one option for establishing the EPZ for SMR or ONT designs.

The general considerations from the existing planning basis for EP, established in NUREG–0396/EPA 520/1–78–016, ''Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants'' (ADAMS Accession No. ML051390356), introduced the concept of generic EPZs as the basis for preplanned response actions. These considerations were intended to result in dose savings to members of the public in the environs of a nuclear facility when the EPA PAGs were used as the threshold to trigger the preplanned protective actions in the event of a reactor accident that would result in offsite dose consequences. Other considerations in the planning basis include the stipulation that no single specific accident sequence should be isolated as the one for which to plan because each accident could have different consequences, both in nature and degree. Planning should be based upon knowledge of the potential consequences, timing, and radiological release characteristics from a spectrum of accidents, including severe accidents. The joint NRC–EPA task force that developed NUREG–0396 considered several possible rationales for establishing the size of the EPZs, including risk, cost effectiveness, and the accident consequence spectrum (dose, significant health effects). After reviewing these alternatives, the NRC–EPA task force concluded that the objective of emergency response plans should be to provide dose savings for a spectrum of accidents that could produce offsite doses in excess of the EPA PAGs for those members of the public who would most likely receive exposure as a result of a significant release.

In the 1980 Final Rule, based on the guidance in NUREG–0396, the NRC established plume exposure pathway and ingestion pathway EPZ requirements for large LWRs of about 10 miles (16 km) and 50 miles (80 km), respectively. The NRC also clarified that the size of the EPZ could be determined on a case-by-case basis for gas-cooled nuclear reactors and for reactors with an authorized power level less than 250 MWt. The NRC stated that this requirement was based on the lower potential hazard from these facilities (*i.e.,* lower radionuclide inventory and longer times to release significant amounts of activity in many scenarios) and clarified that the radionuclides to be considered for large LWR accident scenarios in planning were set forth in NUREG–0396. Similarly, the NRC established in the 1980 Final Rule that the degree to which compliance with sections I through V of appendix E to 10 CFR part 50 would apply to RTRs and fuel cycle facilities would be determined on a case-by-case basis because the radiological hazards to the public associated with their operation involve considerations different than those associated with nuclear power reactors.

In this proposed rule, the NRC would establish a plume exposure pathway EPZ boundary that provides public protection from dose levels above a 10 millisieverts (mSv) [1 roentgen-equivalent man (rem)] total effective dose equivalent (TEDE) threshold. The primary purpose of the plume exposure pathway EPZ is to provide an area where predetermined protective actions are implemented, which result in dose savings and a reduction in early health effects. In determining this boundary, the applicant would consider plume exposure doses from a spectrum of credible accidents for the facility. The NRC expects that areas outside of the site's proposed plume exposure pathway EPZ would not exceed the dose threshold of 10 mSv (1 rem) TEDE based on site-specific meteorology for a spectrum of credible accidents for the facility. The proposed rule would apply the same dose standard for predetermined protective actions to SMRs or ONTs as is required of the current operating large LWRs. By maintaining this consistency, the regulations described in proposed

§ 50.33(g)(2) would afford the same level of protection of the public health and safety as the current regulatory framework.

The principle of using dose savings to determine EPZ size has been used in the past when the NRC licensed several small reactors with a reduced EPZ size of 5 miles (8 km). These reactors include the Fort St. Vrain high-temperature gas-cooled reactor (HTGR) (842 MWt), the Big Rock Point boiling water reactor (BWR) (240 MWt), and the La Crosse BWR (165 MWt).

With the expected safety enhancements in SMR designs and the potential for reduced accident source terms and fission product releases, the NRC is proposing that SMR applicants would develop reduced EPZ sizes commensurate with their accident source terms, fission product releases, and accident dose characteristics. Pre-application conversations between the NRC and SMR designers have indicated that SMRs also could have reduced offsite dose consequences in the unlikely event of an accident.

To support this proposed rule, the NRC conducted research about EPZ size determinations for SMRs and ONTs. Because of the uncertainty and potential variation in SMR or ONT designs, the NRC cannot conduct a comprehensive evaluation of source terms and spectra of accidents as part of this proposed rule. Instead, the research study, ''Generalized Dose Assessment Methodology for Informing Emergency Planning Zone Size Determinations'' (ADAMS Accession No. ML18064A317), dated June 2018, reviewed the dose assessment methodologies that informed the EPZ size determinations in NUREG–0396 and developed a general methodology for determining plume exposure pathway EPZ size based on NUREG–0396. That review, and a subsequent set of recommended analyses documented in ''Required Analyses for Informing Emergency Planning Zone Size Determinations'' (ADAMS Accession No. ML18114A176), dated June 2018, can be used in conjunction with the criterion that the EPZ should encompass an area such that public dose does not exceed 10 mSv (1 rem) TEDE over 96 hours from the release of radioactive materials resulting from a spectrum of credible accidents (design-basis accidents, less severe accidents, and less probable but more severe accidents) at the SMR or ONT facility. The information from these reports was used to develop the methodology described in Appendix A of DG–1350, ''Performance-Based Emergency Preparedness for Small Modular Reactors, Non-Light Water Reactors, and Non-power Production or Utilization Facilities'' (ADAMS Accession No. ML18082A044).

This proposed rule would require applicants to submit an analysis under proposed § 50.33(g)(2) to justify the technical basis for the proposed plume exposure pathway EPZ size. The NRC would then evaluate each application on a case-specific basis. The ''Emergency Planning Zones'' section in this document contains additional discussion on the NRC's consequence-oriented approach to EPZ size determinations for an SMR or ONT facility.

This proposed rule does not provide for a specific ingestion pathway planning zone. The NRC is proposing ingestion response planning requirements instead of an IPZ at a set distance as part of the performance-based framework. Ingestion response planning focuses planning efforts on identification of major onsite and offsite exposure pathways for ingestion of contaminated food and water. This proposed rule would require applicants and licensees who comply with § 50.160 to describe in their emergency plan the licensee, Federal, Tribal, State, and local resources for emergency response capabilities available to sample, assess, and implement a quarantine or embargo of food and water to protect against contaminated food and water entering the ingestion pathway. For those applicants and licensees using § 50.47(b) and appendix E to 10 CFR part 50, the IPZ requirements would remain unchanged.

These emergency response capabilities are implemented either by the licensee within the site boundary or by Federal, Tribal, State, and local authorities in the intermediate or later-stage response to an accident involving the release of radioactive material. Although the sampling, assessing, and imposing of a quarantine or embargo are longer-term issues, some immediate, precautionary actions could be taken prior to a significant release occurring. For example, Tribal, State, and local authorities could instruct individual farmers to wash vegetables and fruits and to place livestock in fields, such as cows, goats, sheep, and so forth, on stored feed. Federal, Tribal, and State authorities frequently issue similar precautionary actions, or implement quarantines or embargos for non-radiological contamination of foods. Further, Federal resources are available upon request to Tribal, State, and local response to any nuclear or radiological incident. Current State and local plans include sampling, assessing, and implementing precautionary actions prior to exceeding dose thresholds or PAGs.

Performance-Based Framework

This proposed rule would create a new section, § 50.160, that would provide a performance-based EP framework for SMRs and ONTs, which would be an alternative to the current regulations. Under proposed § 50.54(q)(2)(ii), licensees would be required to follow and maintain an emergency plan that meets the requirements in either § 50.160 or appendix E to 10 CFR part 50 and, except for NPUF licensees, the planning standards of § 50.47(b). Proposed §§ 50.34 and 52.79, ''Contents of applications; technical information in final safety analysis report,'' would stipulate that SMR and ONT applicants would have the option to choose either approach. Proposed § 50.160 would include: (1) Emergency response functions that must be demonstrated through the regular development and maintenance of performance objectives and periodic drills and exercises, (2) onsite and offsite planning activities to be met by applicants and licensees to which the proposed provision applies, (3) requirements for considering credible hazards associated with contiguous or nearby NRC-licensed and non-licensed industrial facilities, and (4) a requirement for applicants and licensees to determine and describe in the emergency plan the boundary and physical characteristics of the plume exposure pathway EPZ and ingestion response planning capabilities. Licensees would be required under proposed § 50.160(b)(1) to demonstrate effective response in drills and exercises, and describe in their emergency plans how they will maintain preparedness. To comply, emergency plans would need to include a description of how the emergency response functions in proposed § 50.160(b)(1)(iii) and the planning activities in proposed § 50.160(b)(1)(iv), if applicable, would be met.

The NRC has a long history of successful implementation of performance-based EP requirements (*e.g.,* performance-based requirements for emergency facilities and staffing, and the Reactor Oversight Process (ROP)).[5] Under the proposed performance-based approach to EP, performance and results are the primary basis for regulatory decision-making, and the applicant or licensee has the flexibility to determine how to meet the established performance criteria for an effective EP

[5] For further information on the ROP, see: *https://www.nrc.gov/reactors/operating/oversight.html.*

program. The performance-based regimen would focus on actual performance competencies, rather than control of emergency plans and procedures. Regulatory oversight would focus on performance, instead of processes and procedures. The performance-based regimen would provide the NRC with enhanced oversight of the actual competencies important to the protection of public health and safety while allowing applicants and licensees increased flexibility.

The performance-based requirements in proposed § 50.160 address the most risk-significant aspects of EP (*e.g.,* classification, notification, protective action recommendation, mitigation), as well as several planning activities currently required under appendix E to 10 CFR part 50. Compliance under the proposed framework would be demonstrated by performance during drills or exercises and the NRC's review of performance objectives and corrective actions. The NRC, in consultation with FEMA when the EPZ extends beyond the site boundary, would still make reasonable assurance determinations on emergency plans, but the determination would be based on demonstrations of required emergency response functions through drills and exercises and NRC inspections. Between drills and exercises, licensees would maintain a set of performance objectives to measure emergency response performance. See the ''Reasonable Assurance'' section of this document for a discussion of how the proposed approach would maintain reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

Application Process

Current applicants for a construction permit (CP), early site permit (ESP), operating license (OL), or combined license (COL) are required to provide emergency planning information as described under § 50.33, § 50.34, § 52.17, ''Contents of applications; technical information,'' or § 52.79. In particular, § 50.34(a)(10) requires applicants for CPs to describe within the preliminary safety analysis report (PSAR) their preliminary plans for coping with emergencies. Under § 52.17(b), applicants for ESPs must identify within their site safety analysis report physical characteristics of the proposed site that could pose a significant impediment to the development of emergency plans and, as applicable, measures for mitigating or eliminating the significant impediments. Within the site safety analysis report, applicants also have the option of proposing major features of emergency plans (under § 52.17(b)(2)(i)) or complete and integrated emergency plans (under § 52.17(b)(2)(ii)) for review and approval. Applicants for OLs and COLs, as well as ESP applicants choosing to provide emergency plans under § 52.17(b)(2)(ii), must submit radiological emergency response plans of State and local government agencies wholly or partially within the plume exposure pathway EPZ and State governments wholly or partially within the IPZ under § 50.33(g). Under §§ 50.34(b)(6)(v) and 52.79, OL and COL applicants also must include in their final safety analysis report (FSAR) their plans for coping with emergencies.

Because SMR and ONT licensees would be given a choice between complying with either proposed § 50.160 or the requirements in appendix E to 10 CFR part 50 and, except for NPUF licensees, the planning standards in § 50.47, this proposed rule includes a number of conforming changes to clarify application requirements for applicants choosing the performance-based requirements.

- Construction permit and OL applicants would still need to include emergency planning information in their PSARs and FSARs, respectively, and proposed § 50.34(a)(10) and (b)(6)(v) would clarify that the information should describe how the applicant would comply with either appendix E to 10 CFR part 50 or proposed § 50.160.
- Combined license and ESP applicants would need to continue to include emergency planning information in their site safety analysis report and FSAR; proposed §§ 52.17(b)(2), 52.18, and 52.79(a)(21) would clarify that the information should describe how the applicant would comply with either the applicable requirements in § 50.47 and appendix E to 10 CFR part 50, or the proposed requirements in § 50.160.
- Applicants choosing to comply with proposed § 50.160 would need to describe how their emergency plans will meet the performance-based requirements in proposed § 50.160(b). A proposed revision to § 52.1, ''Definitions,'' would clarify that, for applicants choosing the performance-based approach, the definition for ''major feature of the emergency plans'' includes aspects of plans necessary to address the requirements of proposed § 50.160(b).
- Proposed § 50.33(g)(2)(i)(A) would clarify requirements to submit Tribal, State, and local emergency response plans for SMR, non-LWR, and NPUF applicants. Namely, if the application is for an OL or COL, or for an ESP that contains plans for coping with emergencies, and the plume exposure pathway EPZ extends beyond the site boundary (as defined in § 20.1003, ''Definitions''), the applicant must submit Tribal, State, and local emergency response plans.

The requirements in proposed § 50.33(g)(2) also include submission of an analysis for determining the plume exposure pathway EPZ size, which is discussed in the ''Emergency Planning Zones'' section of this document.

Performance Objectives

Applicants and licensees adopting the performance-based regulations would need to describe how they intend to maintain the effectiveness of their emergency plans to meet the performance-based requirements, which includes the implementation of a performance objective scheme that reflects the emergency response functions under proposed § 50.160(b)(1)(iii). The NRC anticipates that performance objectives needed to demonstrate compliance with performance-based requirements would vary by design. Therefore, future additional guidance may be developed by the NRC or by the industry related to performance objectives for specific designs or classes of designs.

Proposed § 50.160(b)(1)(ii) would require applicants and licensees to describe in the emergency plan an approach to develop and maintain at the beginning of each calendar quarter a list of performance objectives for that calendar quarter. Each licensee also would maintain records showing the implemented performance objectives and associated metrics during each calendar quarter for the previous eight calendar quarters. The NRC would monitor the performance objectives and metrics under the ROP to ensure that licensees are maintaining adequate emergency planning and preparedness. During evaluated exercises, the NRC would assess the performance of the licensee and review the ability of the licensee to take corrective actions in a timely manner before performance decreases below performance objective thresholds. In addition, licensees would need to identify downward trends in the implementation of performance objectives or indications that a performance objective has crossed a threshold as part of their corrective action program required under § 50.160(b)(1)(iii)(H).

Drills and Exercises

A key feature of this proposed rule would be the use of drills and exercises

to demonstrate that the applicant's and licensee's EP program is capable of carrying out an effective response in the event of emergency and accident conditions. Current regulations in appendix E to 10 CFR part 50, section IV.F and § 50.47(b)(14) include requirements for periodic drills and exercises for nuclear power reactor licensees. Proposed § 50.160(b)(1)(iii) would establish the emergency response functions to be demonstrated through drills and exercises. Unlike the existing drill and exercise requirements in appendix E to 10 CFR part 50, the proposed performance-based requirements would not define the required frequency of drills and exercises or their scenarios. However, the NRC anticipates that applicants and licensees would adopt an exercise cycle of eight years during which licensees would vary the content of exercise scenarios to provide ERO members the opportunity to demonstrate proficiency in the key skills necessary to respond to several specific scenario elements. Applicants and licensees would be required to describe exercise scenario elements necessary to demonstrate the emergency response functions in their emergency plans. Under proposed § 50.160(c), prior to operating the facility, the NRC also would require the applicant for an OL or a holder of a COL prior to the Commission's § 52.103(g) finding to conduct an initial exercise to demonstrate the effectiveness of the EP program no later than 18 months before the issuance of the OL for the applicant or 18 months before fuel loading for the COL holder.

For facilities with EPZs that do not extend beyond the site boundary, OROs would not be required to participate in radiological drills and exercises. Participation would not be required because Tribal, State, and local government organizations would not need to take specialized actions in response to an event, other than providing onsite firefighting, law enforcement, and ambulance/medical services. Applicants and licensees may consider allowing Tribal, State, or local government organizations to participate in drills when requested by the offsite authorities. The ''Offsite Radiological Emergency Preparedness Planning Activities'' section of this document addresses ORO participation for facilities with EPZs that extend beyond the site boundary.

Under proposed § 50.160(b)(1)(iii), the applicant's or licensee's emergency response team would need to have sufficient capability to demonstrate the following emergency response functions:

- *Event classification and mitigation.* The applicant or licensee would need to establish an emergency classification and action level scheme with established criteria for determining the need for notification of Tribal, State, and local agencies, and participation of those agencies in emergency response such that demonstration of the scheme can be achieved through the performance of drills or exercises within a performance-based framework. Applicants and licensees would need to demonstrate the ability to assess, classify, monitor, and repair facility malfunctions and return the facility to safe conditions. The term ''safe conditions'' means that the facility has been restored to a radiologically safe and stable condition. The requirements of this section are not meant to apply to severe accident management guidelines, extensive damage mitigation guidelines, or other non-emergency plan implementing procedures or programs.
- *Protective actions.* The drill and exercise program would need to demonstrate that consequences to onsite personnel could be reduced through the effective use of protective actions. Applicants and licensees would need to demonstrate the ability to recommend protective actions to offsite authorities as conditions warrant.
- *Communications.* The drill and exercise program would need to demonstrate that control room staff are capable of making effective communications to the ERO, including emergency response personnel. Control room staff and the emergency response team must have a means for maintaining communication with the NRC as needed, and with OROs based on prior arrangements. For example, the applicant or licensee would need to notify and maintain communications with the fire brigade, rescue squad or medical dispatch, and law enforcement according to established agreements. As EP programs are developed, applicants and licensees would need to determine if notification to OROs is appropriate. If notification to OROs is necessary, then drills and exercises would need to demonstrate notifying the Tribal, State, and local officials of an emergency.
- *Command and control.* The drill or exercise would need to demonstrate continuity of operations through one or more shift changes of emergency response personnel, including the augmentation of the ERO. The applicant's or licensee's supporting organizational structure would need to have defined roles, responsibilities, and authorities, and the drill or exercise would need to show how key emergency response organization functions (*e.g.,* communications, command and control of operations, notification of OROs, accident/incident assessment, information dissemination to OROs and media, radiological monitoring, protective response, security) would be maintained around the clock throughout the emergency.
- *Staffing and operations.* The drills or exercises would need to demonstrate effective emergency response with the level of staffing at the SMR or ONT as described in the emergency plan. There would need to be sufficient on-shift staff to perform all necessary tasks until augmenting staff arrive to provide assistance. This is of particular interest to the NRC because of the potential for reduced staffing levels at SMRs and ONTs, as compared to large LWRs. For example, some SMR and ONT designs may use multiple modules at one site with a single, centralized control room. Designers have indicated that they are considering designs that can operate with a staffing complement that is less than what is currently required of large LWRs by § 50.54(m), which sets forth the minimum licensed operator staffing requirements. Under this proposed rule, drills and exercises would provide the NRC the opportunity to consider the sufficiency of emergency response staffing to implement the roles and responsibilities described in the emergency plan. The performance opportunities would allow applicant and licensee staff to develop, maintain, or demonstrate key skills and provide applicants, licensees, and the NRC the opportunity to identify and correct any weaknesses or deficiencies.
- *Radiological Assessment.* During the proposed drills or exercises, control room staff, on-shift personnel, and the emergency response team would need to demonstrate the ability to assess radiological conditions, including the ability to monitor and assess dose to personnel resulting from radiological releases and inadvertent criticality accidents; conduct radiological surveys; assess and report information to the ERO such as early indications of loss of adequate core cooling and radiological releases, including the release of hazardous chemicals produced from licensed material; use protective equipment; and demonstrate implementation of onsite protective actions.
- *Reentry.* Reentry is the temporary movement of people into an area of actual or potential hazard. The applicant or licensee also would need to demonstrate general plans for reentry after an emergency through drills or exercises. The applicant or licensee would need to demonstrate reentry

plans for the site boundary, including determining when facility conditions are acceptable to justify reentry (*e.g.,* based on air and soil sampling and analysis to determine levels of radiological contamination and projected dose). Certain individuals who have been evacuated or relocated from a restricted area may be allowed to reenter under controlled conditions to perform specified activities.

• *Critique and corrective actions.* The performance of emergency response functions, including the outcomes of drills and exercises (or responses to actual emergencies), would be evaluated to identify areas for improvement in the EP program. The applicant or licensee would need to use a corrective action program to evaluate, track, and correct EP deficiencies. Deficiencies may include items such as errors in the emergency plan or implementing procedures, ERO weaknesses identified in drills or exercises, downward trends in the achievement of performance objectives or indications that a performance objective has crossed a threshold, or degraded conditions in emergency response facilities, systems, and equipment. Corrective actions may require a variety of actions, including remedial exercises to demonstrate that the deficiencies have been fully addressed.

Planning Activities

In addition to an applicant's or licensee's performance demonstrations through drills and exercises, the NRC is proposing a set of required planning activities in § 50.160(b)(1)(iv) to account for certain EP-related activities that are not readily observable or effectively measured through drills and exercises. This proposed rule includes two sets of planning activities: § 50.160(b)(1)(iv)(A) would establish planning activities for all applicants and licensees complying with § 50.160; and § 50.160(b)(1)(iv)(B) would establish planning activities that would apply to applicants and licensees with a plume exposure pathway EPZ that extends beyond the site boundary.

Currently, § 50.47(b) requires licensees to be capable of maintaining prompt communication among the response organizations and the public. In proposed § 50.160(b)(1)(iv)(A)(*1*), SMR and ONT applicants and licensees would be required to be capable of preparing and issuing information to the public during emergencies to protect public health and safety. The NRC is proposing in § 50.160(b)(1)(iv)(A)(*2*) that applicants and licensees also must be capable of implementing the NRC-approved emergency response plan in conjunction with the Licensee Safeguards Contingency Plan. In implementing the emergency response plan, licensees should coordinate security-related and emergency response activities to ensure an adequate and efficient response to a radiological event. In proposed § 50.160(b)(1)(iv)(A)(*3*), the NRC would require applicants and licensees to have the capability to establish voice and data communications with the NRC for use during emergencies. Voice communication through the Emergency Notification System (ENS) and data communication through an electronic data link would provide timely updates to the NRC on the implementation of the emergency plan during and after an emergency. Finally, proposed § 50.160(b)(1)(iv)(A)(*4*) would require applicants and licensees to have the capability to establish emergency response facilities to support the emergency response functions required in § 50.160(b). Applicants and licensees would need to establish a facility from which effective direction can be given and effective control can be executed for the duration of an emergency. Depending on design- and site-specific considerations, applicants and licensees may need to establish multiple emergency response facilities to demonstrate the capability to support emergency response functions. Emergency plans would need to include descriptions of the facilities' functional capabilities, activation times, staffing, and communication systems.

Offsite Radiological Emergency Preparedness Planning Activities

Current requirements for offsite radiological emergency response plans are included in § 50.47 and appendix E to 10 CFR part 50 and, in select cases, the NRC has granted exemptions from these requirements to licensees based partially on a demonstration that an offsite radiological release would not exceed the EPA PAGs at the site boundary. For SMR and ONT applicants and licensees complying with proposed § 50.160 that establish a plume exposure pathway EPZ at the site boundary, the NRC would not mandate offsite radiological emergency planning activities. Proposed § 50.160(b)(1)(iv)(B) would establish offsite planning activities that must be described in the emergency plan for applicants and licensees with plume exposure pathway EPZs extending beyond the site boundary. These activities would include:

• *Contacts/arrangements with governmental agencies.* Applicants and licensees would need to describe in emergency plans their contacts and arrangements with OROs for offsite radiological emergency response, including the roles of each organization in the ERO. Applicants and licensees would need to ensure regular coordination with these organizations, including review of emergency plan changes.

• *Notification of OROs.* Applicants and licensees would need to establish primary and backup means of notifying OROs and a message authentication scheme. The emergency plan would need to include the proposed time period within which notifications to OROs would be made.

• *Protective measures.* Applicants and licensees would need to maintain the capability to issue offsite protective action recommendations to OROs (*e.g.,* evacuation, sheltering). The emergency plan would need to describe the procedures by which protective measures are implemented, maintained, and discontinued in their emergency plans.

• *Offsite agency training.* Applicants and licensees would need to provide site familiarization training to individuals whose assistance may be needed in the event of a radiological emergency, including personnel from offsite organizations.

• *Evacuation time estimate study.* Applicants and licensees would need to conduct an evacuation time estimate (ETE) study and maintain the ETE up-to-date. The methodologies described in existing NRC published or endorsed guidance should be used to prepare the ETE.

• *Emergency response facilities.* Applicants and licensees would need to describe in their emergency plans an offsite facility and any backup facilities for coordination of the response with OROs.

• *Offsite dose projections.* Applicants and licensees would need to be capable of making offsite dose assessments and communicating their results to OROs. The emergency plan would need to describe the methods and instruments available for conducting these assessments.

• *Dissemination of public information.* Applicants and licensees would need to describe in their emergency plans the means of providing initial and updated information to the public during an emergency (*e.g.,* communication with the news media, coordination with OROs). Applicants and licensees would need to describe the public alert and notification system.

• *Reentry.* Applicants and licensees would need to describe in their emergency plans coordination with OROs on offsite reentry plans including

the conditions necessary to allow reentry. Some conditions may include: (1) Use of access control points to issue dosimetry and train reentering individuals on its use; (2) use of stay times (as used here, the amount of time a person can safely stay in a restricted zone without exceeding their exposure limit), depending on the location of the reentry destination; (3) use of a health physicist escort or other personnel escort trained in the use of dosimetry; and (4) provision of monitoring and decontamination for exiting individuals. Reentry plans would cover private citizens. For example, reentry plans may cover scenarios such as farmers being permitted to reenter the affected area to provide essential care for livestock.

• *Offsite drills and exercises.* Applicants and licensees would need to describe in their emergency plans how offsite radiological emergency response is incorporated into their drill and exercises. Drill and exercise scenarios would need to incorporate offsite response, and applicants and licensees would need to coordinate with offsite organizations, including FEMA, for their participation in drills and exercises and implementation of corrective actions.

• *Emergency plan maintenance.* Applicants and licensees would need to maintain up-to-date the emergency plan, contacts and arrangements with OROs, procedures, and ETEs. Emergency plans would need to include a description of the periodic coordination with OROs.

In carrying out its responsibility under the Atomic Energy Act of 1954, as amended (AEA), the NRC establishes regulatory standards for onsite and offsite radiological emergency planning. If an applicant's or licensee's emergency plan meets the NRC's regulations, then the NRC has reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. In the case of existing EP regulations for NPUFs, fuel cycle facilities, and ISFSIs, there are no regulatory requirements for dedicated offsite radiological emergency plans as part of the NRC license. Accordingly, NRC guidance for such facilities states that FEMA findings and determinations are not needed to support NRC licensing decisions. Similarly, for SMRs and ONTs within the scope of this proposed rule, FEMA findings and determinations regarding reasonable assurance under proposed § 50.54(s)(3) would only be needed for a facility where the plume exposure pathway EPZ extends beyond the site boundary requiring dedicated offsite radiological EP plans for the facility.

The NRC's proposal not to require offsite planning activities for facilities with plume exposure pathway EPZs at the site boundary would not affect the authority that FEMA has under its regulations in Chapter I, ''Federal Emergency Management Agency, Department of Homeland Security,'' of 44 CFR, ''Emergency Management and Assistance,'' for overall emergency management and assistance to State and local response organizations. Nor would it affect the responsibilities of State and local governments to establish and maintain comprehensive emergency management plans. Under its role as described in the National Response Framework, the NRC remains ready to provide FEMA and State and local governments with technical advice related to the safety and security of any proposed SMR or ONT facility.

In cases where the plume exposure pathway EPZ does not extend beyond the site boundary, even in the absence of NRC requirements for offsite radiological emergency planning, the responsible OROs would continue to take actions to protect the health and safety of the public. As provided for in the Tenth Amendment to the U.S. Constitution and State constitutions and statutes, State and local governments are responsible for the overall protection of public health and safety in their localities when the Federal government does not have such authority. Each of the states has established an emergency management organization to facilitate the safeguarding of the life and property of its citizens.[6] Based on the NRC's evaluation of a limited set of ORO capabilities in NUREG/CR–7248, ''Capabilities and Practices of Offsite Response Organizations for Protective Actions in the Intermediate Phase of a Radiological Emergency Response'' (ADAMS Accession No. ML18170A043), dated June 2018, the NRC has high confidence in the ability of OROs to implement appropriate response actions when necessary. The OROs' general emergency response capabilities are not unique to radiological emergency response. The NRC's confidence is further strengthened by the NRC's regulations in § 50.47(c)(1)(iii) and the NRC's recognition of national-level efforts (*e.g.,* National Incident Management System,[7] National Preparedness Goal,[8] Core Capabilities,[9] National Preparedness System,[10] National Planning Frameworks),[11] in which the NRC participates, to improve the state of emergency planning at all levels of government and within the whole community.[12] Consequently, for SMR and ONT facilities with plume exposure pathway EPZs at the site boundary, there is reasonable assurance that appropriate response actions can and will be taken in the event of a radiological emergency, without the need for regulatory standards for offsite radiological emergency response plans and the associated FEMA findings and determinations that offsite plans are adequate and can be implemented.

Changes to Emergency Plans

Section 50.54(q) currently establishes the process for evaluation, submission, and review of changes to emergency plans. The NRC is proposing that SMRs and ONTs continue to follow the existing process for changes to emergency plans, whether the facilities are following the performance-based approach to EP under proposed § 50.160 or the approach to EP under appendix E to 10 CFR part 50. The NRC's proposal includes a number of conforming changes to § 50.54(q).

Existing § 50.54(q)(2) requires licensees to follow and maintain the effectiveness of an emergency plan that meets the planning standards in § 50.47(b) and the requirements in appendix E to 10 CFR part 50, and existing § 50.54(q)(3) and (4) describe the process for analyzing, submitting, and making changes to emergency plans. The NRC is proposing to revise § 50.54(q)(2) through (4) to include cross-references to the requirements under proposed § 50.160 for licensees choosing the performance-based approach and to clarify that licensees must follow and maintain an emergency plan that meets either the applicable requirements of § 50.160 or the requirements of appendix E to 10 CFR part 50 and, except for NPUF licensees, the planning standards of § 50.47(b). The NRC is not proposing any changes to the emergency plan change process.

[6] See FEMA's Emergency Management Agencies website *https://www.fema.gov/emergency-management-agencies.*

[7] For further information on the National Incident Management System, see: *https://www.fema.gov/pdf/emergency/nims/nimsfaqs.pdf.*

[8] For further information on the National Preparedness Goal, see: *https://www.fema.gov/national-preparedness-goal.*

[9] For further information on Core Capabilities, see: *https://www.fema.gov/core-capabilities.*

[10] For further information on the National Preparedness System, see: *https://www.fema.gov/national-preparedness-system.*

[11] For further information on the National Planning Frameworks, see: *https://www.fema.gov/national-planning-frameworks.*

[12] For more information on the definition of ''whole community,'' see: *https://www.fema.gov/whole-community#.*

Licensees choosing the performance-based approach to EP would need to evaluate changes to their emergency plans against the performance-based requirements under proposed § 50.160 using the same reduction in effectiveness criteria as current licensees and would still need to submit changes that reduce the effectiveness of the plan to the NRC for approval prior to implementation. The definition of ''emergency planning function'' under proposed § 50.54(q)(1) would be revised to remove references to appendix E and § 50.47(b) because emergency planning functions would be addressed under both these sections and under the proposed § 50.160, and the NRC does not consider the references essential to the definition.

For any existing or future holder of an operating or combined license for an SMR or non-LWR, or any future holder of an operating license for an NPUF, proposed § 50.54(q)(7) would stipulate that a licensee desiring to change its emergency plan to comply with the performance-based approach to EP would need to submit a license amendment request with the proposed changes to its emergency plan. The request would need to include an explanation of the schedule and analyses supporting the implementation of a performance-based EP program.

Emergency Response Data System

Appendix E to 10 CFR part 50, section VI, ''Emergency Response Data System,'' outlines a set of system, testing, and implementation requirements for the emergency response data system (ERDS) for operating nuclear power reactor licensees, and § 50.72, ''Immediate notification requirements for operating nuclear power reactors,'' includes requirements for activation of ERDS. In contrast, the 10 CFR part 50, appendix E ERDS requirement and § 50.72 ERDS activation requirement would not be applicable to applicants and licensees choosing to comply with § 50.160. Applicants and licensees choosing § 50.160 would be required to describe in their emergency plans the data links with the NRC for use in emergencies. Specific parameters to be reported would be determined for the specific technology during the license application process under 10 CFR part 50 or 10 CFR part 52. The NRC would review each applicant's data transmission capabilities on a case-specific basis. The NRC is not proposing any changes to its ERDS regulations.

Hazard Analysis of Contiguous or Nearby Facilities

The NRC anticipates that SMRs and ONTs may be located on the same site or close to large LWRs or other types of reactors; industrial, military, or transportation facilities; or a combination of these or other facilities. The presence of such facilities would require additional EP considerations relative to an independently sited facility. For example, SMRs or ONTs may need to be prepared for events associated with other contiguous or nearby facilities' proximate hazards.

Although the NRC's regulations do not extend to the licensing, operations, or oversight of non-nuclear facilities, the NRC has authority over the activities of NRC applicants and licensees that are located on or close to an industrial site or other non-licensed facility. For example, a nuclear power facility could be sited contiguous or nearby to an industrial facility to supply process heat or electrical power, or an SMR could be used to power a desalination facility located on the same site. There are many potential examples of licensees that may be located contiguous or nearby to a non-licensed facility but, under each scenario, the hazards of the non-licensed facility must be factored into the EP program of the nuclear facility to ensure the protection of public health and safety, and the environment.

For SMR or ONT applicants and licensees located contiguous or nearby to another facility, proposed § 50.160(b)(2) would require the applicant or licensee to perform a hazard analysis to assess any credible hazards that would adversely impact the implementation of emergency plans at the SMR or ONT facility. The analysis would need to identify site-specific, credible hazards from other, non-nuclear facilities that require the applicant's or licensee's emergency plan to include arrangements that would otherwise not be needed in the absence of the facility. For example, these arrangements might include notifying contiguous or nearby facilities regarding emergencies, classifying a hazard from another facility that may negatively impact the safe operation of the nuclear facility, and providing for protective actions for the other facility's personnel or other on-site individuals, such as visitors. A credible hazard could include any event at another facility's site that would lead to an emergency response at the SMR or ONT facility. It may be appropriate for SMRs or ONTs with contiguous or nearby facilities to consider a quantitative or qualitative assessment of all postulated accident scenarios at the other facilities. The applicant's or licensee's EP program would reflect these credible hazards and the planning activities needed to address the hazards. For example, the location of facilities on the same site or close to an SMR or ONT may affect the applicant's or licensee's determinations about the EPZ size. Looking across all facilities, the applicant or licensee would assess the combined radiological and industrial hazards at the site.

The NRC is issuing DG–1350 for public comment with this proposed rule that includes guidance on hazard analyses for contiguous or nearby facilities.

Emergency Planning Zones

The NRC is proposing a consequence-oriented, technology-inclusive approach to EPZ size determinations for SMRs and ONTs. This proposed approach is similar to the dose/distance rationale historically used by the NRC in part to determine EPZ size for production or utilization facilities. Under the existing regulations, SMRs or ONTs, depending on their capacity and technology, are either required to establish a 10-mile (16-km) plume exposure pathway EPZ and a 50-mile (80-km) IPZ or follow the case-by-case EPZ size determination process under §§ 50.33(g), 50.47(c)(2), and section I.3. of appendix E to 10 CFR part 50. Pre-application discussions and previous applications for EP exemption requests from SMRs and ONTs have indicated that these technologies could have reduced offsite dose consequences in the unlikely event of an accident, and the standard 10-mile (16-km) and 50-mile (80-km) EPZs may not be necessary to ensure public health and safety for these facilities. Because of the range of potential source terms and designs for SMRs or ONTs, the NRC is proposing an alternative scalable methodology for determining EPZ size on a case-specific basis. This methodology would be established in guidance (DG–1350) generically without design- or site-specific information regarding source term, fission products, or projected offsite dose. Applicants would provide the design- and site-specific information regarding source term, fission products, or projected offsite dose for NRC review in an application.

As mentioned in the ''Technical Basis'' section of this document, NUREG–0396 established the planning basis for EP and established EPZs for large LWRs based on the conclusion that the objective of emergency response plans should be to provide dose savings for a spectrum of accidents that could produce offsite doses in excess of the

EPA PAGs. The NRC is proposing an EPZ size determination process that is consistent with this philosophy. Proposed § 50.33(g)(2) would establish an EPZ size determination process for SMR, non-LWR, and NPUF applicants complying with § 50.160. Small modular reactor and non-LWR applicants for an OL, COL, CP, or ESP and NPUF applicants for a CP or OL would be required to submit the analysis used to establish their proposed plume exposure pathway EPZ size. Applicants would need to establish their EPZ as the area within which public dose, as defined in § 20.1003, is projected to exceed 10 mSv (or 1 rem) TEDE over 96 hours from the release of radioactive materials resulting from a spectrum of credible accidents for the facility. If the plume exposure pathway EPZ extends beyond the site boundary and if the application is for an SMR or non-LWR OL, COL, an ESP that contains plans for coping with emergencies under § 52.17(b)(2)(ii), or an ESP that proposes major features of the emergency plans and describes the EPZ, then proposed § 50.33(g)(2) would require that the exact configuration of the plume exposure pathway EPZ be determined in relation to local emergency response needs and capabilities, as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. Proposed § 50.160(b)(3) would require applicants and licensees to incorporate the boundaries and physical descriptions of the EPZ into their emergency plans.

To support the technical basis for this proposed rule, the NRC conducted research studies (ADAMS Accession Nos. ML18064A317 and ML18114A176), dated June 2018 to support EPZ size determinations for SMRs and ONTs. Supported by the results of these studies, the NRC is including guidance in Appendix A to DG–1350 for determining the EPZ size based on the NRC staff's evaluation of a spectrum of accidents and the criterion in proposed § 50.33(g)(2) that the plume exposure pathway EPZ should be established as the area in which public dose is projected to exceed 10 mSV (1 rem) TEDE over 96 hours from the release of a spectrum of credible accidents for the facility. In the DG, the NRC is providing general guidance and anticipates that industry will develop and implement detailed design-specific calculations for NRC review and approval. The NRC's guidance is not a regulatory requirement and applicants and licensees may use alternative approaches to meeting regulatory requirements as long as appropriately supported and justified.

Upon receiving an OL, COL, ESP, or CP applicant's technical basis for proposed site-specific plume exposure pathway EPZ size, the NRC would review the design and licensing information to ensure that the information that the applicants provide on the offsite dose consequences is commensurate with the requested EPZ size and that the applicable performance-based requirements are met to ensure adequate protection of public health and safety and the environment. Some of this information may have already been provided as part of a certified design referenced in an application or in a topical report related to the design. The NRC would consider an appropriate spectrum of accidents to provide a basis for judging the adequacy of features such as functional containment design and the need for offsite emergency planning. The NRC also would assess the need to provide site-specific guidance concerning the accident scenarios being considered.

In addition to the proposed plume exposure pathway EPZ size determination process, the NRC is proposing to include ingestion response planning requirements under proposed § 50.160(b)(4). Applicants and licensees complying with proposed § 50.160 would be required to describe in their emergency plans the capabilities to protect contaminated food and water from entering the ingestion pathway. The capabilities described in the emergency plan would need to address major exposure pathways associated with the ingestion of contaminated food and water. The duration of any exposure to contaminated food or water could range from hours to months and represents a long-term response need. Even in cases where the facility's plume exposure pathway EPZ is bounded by the site boundary, the applicant or licensee would reference capabilities of Federal, Tribal, State, and local Federal authorities.

Three notable incidents documented by the Center for Disease Control and Prevention that demonstrate the capability to conduct large-scale quarantines are the multi-state outbreaks of E. Coli O157:H7 infections from spinach (September–October 2006), the multi-state outbreak of human *salmonella enteritis* infections associated with shell eggs (July–December 2010), and the multi-state outbreak of fungal meningitis and other infections (October 2012). In each case, the successful quarantine and removal from public access of contaminated food and water products in response to biological contamination demonstrates that a response to prevent ingestion of contaminated foods and water could be performed in an expeditious manner without a predetermined planning zone.

Implementation

The NRC is proposing implementation schedules for existing and future applicants and licensees of facilities choosing to comply with proposed § 50.160. Per the requirements of proposed § 50.160(c)(1), an applicant for an operating license issued under 10 CFR part 50 after the effective date of this proposed rule desiring to comply with the performance-based approach to EP and within the scope of that approach as stated in this proposed rule would be required to establish, implement, and maintain an EP program that meets the requirements of proposed § 50.160(b) and conduct an initial exercise to demonstrate this compliance no later than 18 months before the issuance of an operating license for the first unit described in the license application. Per the requirements of § 50.160(c)(2), a holder of a combined license issued under 10 CFR part 52 desiring to comply with the performance-based approach to EP before the Commission has made the finding under § 52.103(g) would be required to establish, implement, and maintain an emergency preparedness program that meets the requirements of proposed § 50.160(b), as described in the emergency plan and license, and conduct an initial exercise to demonstrate this compliance no later than 18 months before the scheduled date for initial loading of fuel.

As discussed in the ''Changes to Emergency Plans'' section of this document, for existing or future SMRs or ONTs that hold operating or combined licenses, proposed § 50.54(q)(7) would stipulate that facilities desiring to change their emergency plans to comply with the performance-based approach to EP, shall submit a license amendment request with these proposed changes.

Reasonable Assurance

The NRC's authority to regulate the use of radioactive materials is set forth in the AEA and Title II of the Energy Reorganization Act of 1974, as amended (ERA). Both the AEA and ERA confer broad regulatory powers to the Commission and specifically authorize it to issue regulations it deems necessary to fulfill its responsibilities under those statutes. Section 161.b of the AEA authorizes the Commission to establish by rule, regulation, or order such standards and instructions to

govern the possession and use of special nuclear material, source material, and byproduct material as the Commission may deem necessary or desirable to promote the common defense and security or to protect health or to minimize danger to life or property. Under Section 161.i of the AEA, the Commission may prescribe such regulations or orders, as it may deem necessary, to protect health and to minimize danger to life or property.

The NRC's regulations include standards for both onsite and offsite emergency response plans. The Commission, based on its authority under the AEA, determined that these standards are necessary for operating power reactors to provide for public health and safety. The regulations in §§ 50.47 and 50.54, prescribe how the NRC will make licensing decisions or take appropriate enforcement action by using findings of reasonable assurance that adequate protective measures can and will be taken to protect public health and safety in the event of a radiological emergency. The NRC will base reasonable assurance findings on: (1) The NRC's assessment of the adequacy of the applicant's or licensee's onsite emergency plan and whether there is reasonable assurance the plan can be implemented, and (2) the NRC's review of FEMA findings and determinations as to whether Tribal, State, and local emergency plans are adequate and whether there is reasonable assurance that they can be implemented.

The proposed performance-based approach to EP under § 50.160 would provide for an adequate basis for an acceptable state of EP and ensure that coordination and applicable arrangements with offsite agencies are maintained (*e.g.,* notification and assistance resources). Reasonable assurance will be maintained under the proposed performance-based approach through: (1) Submission and case-specific review of design- and site-specific analyses to support the proposed plume exposure pathway EPZ size; (2) review of site-specific emergency plans to ensure compliance with the proposed performance-based requirements; (3) demonstration of emergency response functions through drills and exercises; (4) regular tracking of performance objective information; (5) analysis of potential hazards associated with contiguous or nearby NRC-licensed or non-licensed facilities; and (6) the NRC's inspection and enforcement program. Proposed § 50.160(b) would state that the NRC would not issue an initial operating license to a licensee complying with proposed § 50.160 unless a reasonable assurance finding is made.

For applicants and licensees with plume exposure pathway EPZs beyond the site boundary, the NRC, in consultation with FEMA, would continue to make a determination of reasonable assurance based on the performance-based requirements, as demonstrated through drills and exercises. As described in the ''Offsite Radiological Emergency Preparedness Planning Activities'' section of this document, the NRC is proposing that FEMA findings and determinations regarding reasonable assurance under § 50.54(s)(3) would not be needed for SMRs or ONTs with plume exposure pathway EPZs that do not extend beyond the site boundary. The NRC would continue to make reasonable assurance determinations regarding onsite EP requirements for these facilities, and every licensee must follow and maintain the effectiveness of its emergency plan if the NRC is to continue to find, under § 50.54(s)(2)(ii), that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at that site.

Administrative and Clarifying Changes to the Regulations

The NRC is proposing clarifying changes to the following paragraphs.

1. Section 50.54(q)(4), which required after February 21, 2012, any changes to licensee's emergency plan that reduce the effectiveness of the plan as defined in paragraph (q)(1)(iv) to be submitted to the NRC for approval before implementation. As the date of the provision has expired, the NRC is proposing to delete ''after February 21, 2012'' and retain the remainder of the provision.

2. Section 50.54(q)(5), which required licensees to submit a report of each change made without prior NRC approval, as allowed under § 50.54(q)(3), after February 21, 2012, including a summary of its analysis, within 30 days after the change is put into effect. The NRC is proposing to delete ''after February 21, 2012'' from this provision, as the date has expired, and retain the remainder of the provision.

3. Section 50.54(s)(2)(ii), which allows the NRC to take enforcement action to shut down power reactors that do not provide reasonable assurance that adequate protective measures would be taken in the event of a radiological emergency after April 1, 1981. There is no longer a need for the date requirement of this provision because any future determinations made under § 50.54(s) will occur after April 1, 1981. The NRC is proposing to delete ''after April 1, 1981'' and retain the remainder of the provision.

The NRC is proposing to revise these paragraphs in the interest of regulatory clarity. Eliminating these requirements would not relax currently effective regulatory requirements or cause any regulatory burden for existing or future licensees.

IV. Specific Requests for Comments

The NRC is seeking public comment on this proposed rule. The NRC staff is particularly interested in comments and supporting rationale from the public on the following:

- *Terminology used to describe the requirements:* This proposed rule continues the practice from SECY–11–0152, ''Development of an Emergency Planning and Preparedness Framework for Small Modular Reactors,'' of describing the alternative framework for EP as ''technology-neutral, dose-based, and consequence-oriented.'' The NRC recognizes, however, that the overarching term ''risk-informed'' as defined by the Commission in ''STAFF REQUIREMENTS—SECY–98–144—White Paper on Risk-Informed and Performance-Based Regulation'' (ADAMS Accession No. ML003753601), includes consideration of both the likelihood of a spectrum of events and their consequences. In the context of EP, the consequences of concern would be dose. The NRC is therefore considering aligning the discussion of the EP framework in this rule with its other risk-informed, performance-based regulations and considering eliminating the use of the descriptors ''dose-based'' and ''consequence-oriented,'' but intends no change to the meaning of the proposed regulations. Would such a change impact the clarity and predictability of the regulations?
- *Scope of this proposed rule:* This proposed rule would allow SMRs and ONTs to establish an alternative performance-based, consequence-oriented approach to EP. The NRC received a comment on its draft regulatory basis in 2017 that recommended that the NRC expand the scope of this proposed rule to include large LWRs. Large LWRs were not included by the NRC in the scope of this proposed rule because an EP licensing framework already exists for those reactors, and licensees for those plants have not presented a clear interest in changing that framework. Nonetheless, in light of the public comment on the draft regulatory basis, and although this proposed rule is written for SMRs and ONTs, the NRC is open to considering

a performance-based, consequence-oriented approach to EP for large LWRs, fuel cycle facilities, and currently operating NPUFs.

Are the proposed ''non-light-water reactor,'' ''non-power production or utilization facility,'' and ''small modular reactor'' definitions in § 50.2 sufficient to address EP for existing and anticipated technologies? Are there any unintended consequences of including each of these classes of facilities within the scope of this proposed rule? Please provide the basis for your response.

Should the NRC consider a performance-based, consequence-oriented approach to EP for entities besides SMRs and ONTs (*e.g.,* large LWRs, fuel cycle facilities, and currently operating NPUFs) in a future rulemaking? Please provide a basis for your response.

If the NRC considers a performance-based, consequence-oriented approach to EP for entities other than SMRs and ONTs, what criteria should such entities be required to meet to use a performance-based, consequence-oriented approach to EP in a future rulemaking? Please provide a basis for your response.

If the NRC does not consider a performance-based, consequence-oriented approach to EP for entities other than SMRs and ONTs, should the NRC offer mechanisms (other than the existing exemption process) that would allow other entities to request NRC approval to use the EP framework proposed in this rulemaking? If so, what mechanisms? Please provide a basis for your response.

• *Performance-based requirements:* Under this proposed rule, applicants and licensees choosing to comply with the performance-based approach would need to demonstrate emergency response functions required under § 50.160(b)(1)(iii) through the use of drills or exercises and performance objectives. Are there additional emergency response functions that the NRC should consider for incorporation in this proposed rulemaking? Please provide the basis for your answer.

• *Drills or exercises:* Under proposed § 50.160(b)(1), applicants and licensees would need to develop a drill and exercise program to demonstrate compliance with performance-based requirements. Would an 8-year exercise cycle (as is currently required for large LWRs) be appropriate for SMRs or ONTs choosing to comply with the performance-based approach? If not, would an alternative cycle length be appropriate? Please provide the basis for your answer.

• *Planning activities:* The NRC is proposing four planning activities under § 50.160(b)(1)(iv)(A) that all applicants and licensees choosing the performance-based approach to EP would need to comply with and 11 offsite planning activities under § 50.160(b)(1)(iv)(B) that are designed for applicants and licensees with an EPZ that extends beyond the site boundary. These planning activities identify certain EP-related activities that are not readily observable and cannot be effectively measured through drills and exercises. Are there any planning activities that should be added to or removed from the NRC's proposed list? Please provide the basis for your answer.

• *Hazard analysis for contiguous or nearby facilities:* The NRC is proposing to require applicants and licensees choosing a performance-based approach to EP to submit a hazard analysis under § 50.160(b)(2). To what extent should this analysis be harmonized with or rely upon the analysis conducted under 10 CFR 100.20, ''Factors to be considered when evaluating sites,'' for man-related hazards? What kinds of facilities might be located contiguous or nearby to SMRs or ONTs? Should the NRC change the scope of the hazard analysis? If so, how should the scope of the hazard analysis change? Please provide the basis for your answer.

• *Emergency planning zones:* The NRC is proposing to require applicants and licensees choosing to comply with proposed § 50.160 to submit the analysis used to establish a site-specific plume exposure pathway EPZ size. The analysis for the proposed EPZ size would be reviewed on a case-specific basis by the NRC to ensure that design- and site-specific accident scenarios are appropriately incorporated and that reasonable assurance is maintained with the proposed EPZ size. Applicants and licensees would need to establish their plume exposure pathway EPZ as the area within which public dose is projected to exceed 10 mSv (1 rem) TEDE over 96 hours from the release of radioactive materials resulting from a spectrum of credible accidents for the facility. Is the proposed 10 mSv (1 rem) criterion appropriate? Are there particular factors and technical considerations that need to be included in an EPZ size analysis? If the analysis demonstrates that the EPZ is within the facility's site boundary, would the need for a dedicated, Federal-mandated offsite radiological emergency preparedness program exist? If the applicant or licensee provides an adequate description of the existing Federal, Tribal, State, and local Federal capabilities to interdict contaminated food and water, would the need for an IPZ exist? Please provide the basis for your answer.

• *Costs:* The NRC recognizes that all power reactor applicants will develop a PRA to meet existing requirements and support development of their application. The NRC would allow applicants the option to further the use of PRA to support a risk-informed approach for the development of source terms. The NRC is seeking information on the incremental cost estimates for any additional PRA modeling necessary to generate the credible accident sequences and the development of the source terms used in determining a site-specific EPZ size.

V. Section-by-Section Analysis

The following paragraphs describe the specific changes proposed by this proposed rule.

Section 50.2 Definitions

In § 50.2, this proposed rule would add the definitions for *Non-light-water reactor, Non-power production or utilization facility,* and *Small modular reactor.*

Section 50.8 Information Collection Requirements; OMB Approval

In § 50.8, this proposed rule would add new § 50.160 to the list of approved information collection requirements contained in 10 CFR part 50.

Section 50.10 License Required; Limited Work Authorization

In § 50.10, this proposed rule would revise paragraph (a)(1)(vii) to include onsite emergency facilities necessary to comply with new § 50.160 requirements within the scope of items for which a construction permit or limited work authorization is necessary to commence construction.

Section 50.33 Contents of Applications; General Information

In § 50.33, this proposed rule would revise paragraph (g) to create new subparagraphs (g)(1) and (2). Paragraph (g)(1) would contain the original text of paragraph (g) and would add the qualifier ''except as provided in paragraph (g)(2) of this section.''

Paragraph (g)(2) would establish an EPZ size determination process for SMR, non-LWR, and NPUF applicants complying with § 50.160.

Section 50.34 Contents of Applications; Technical Information

In § 50.34, this proposed rule would revise paragraph (a)(10) to require SMR, non-LWR, or NPUF construction permit applicants to describe in their PSARs

the preliminary plans for coping with emergencies based on the requirements in either § 50.160 or appendix E to 10 CFR part 50.

This proposed rule also would revise paragraph (b)(6)(v) to require SMR, non-LWR, and NPUF applicants for an operating license to include in their FSARs their plans for coping with emergencies based on the requirements in either § 50.160 or appendix E to 10 CFR part 50.

Section 50.47 Emergency Plans

In § 50.47, this proposed rule would make conforming changes to paragraph (b) and add new paragraph (f) denoting when the offsite emergency response plan requirements in paragraph (b) of this section do not apply.

Section 50.54 Conditions of Licenses

In § 50.54, this proposed rule would revise paragraph (q)(1)(iii) to remove the reference to appendix E to 10 CFR part 50 and § 50.47(b).

It would revise paragraph (q)(2) to include new subparagraphs (i) and (ii). Paragraph (i) would contain the original text of paragraph (q)(2) and would add the qualifier ''except as provided in paragraph (q)(2)(ii) of this section, and paragraph (ii) would allow SMR, non-LWR, and NPUF licensees to follow and maintain the effectiveness of an emergency plan that meets the requirements of § 50.160 or appendix E to 10 CFR part 50 and, except for NPUF licensees, § 50.47(b).

It also would revise paragraph (q)(3) to include new subparagraphs (i) and (ii). Paragraph (i) would contain the original text of paragraph (q)(3) and would add the qualifier ''except as provided in paragraph (q)(3)(ii) of this section'' and paragraph (ii) would specify when an SMR, non-LWR, or NPUF licensee choosing to comply with the performance-based EP regulations could make changes to its emergency plan without prior NRC approval.

Paragraph (q)(4) and (5) would be revised to remove the date February 21, 2012, and paragraph (q)(4) would be further revised to specify that licensees that choose to comply with the new requirements of § 50.160, when making an emergency plan change that reduces plan effectiveness, would need to specify the basis for concluding how their revised emergency plans continue to meet the requirements of that section.

This proposed rule would add new paragraph (q)(7) that would contain the details for submitting license amendment requests for SMR, non-LWR, or NPUF licensees implementing emergency preparedness programs with the associated plan modifications necessary to meet the requirements of new § 50.160.

Paragraph (s)(2)(ii) would be revised to remove the date April 1, 1981, and to replace the word ''reactor'' with the word ''facility.''

This proposed rule would revise paragraph (s)(3) by adding clarification at the beginning of the sentence that if the standards apply to offsite emergency response plans, or if the planning activities in new § 50.160(b)(1)(iv)(B) apply, then the NRC would base its findings on a review of FEMA's findings and determinations.

This proposed rule would also revise paragraph (gg)(1) to include the option for SMR, non-LWR, or NPUF applicants to use new § 50.160, as applicable.

Section 50.160 Emergency Preparedness for Small Modular Reactors, Non-Light-Water Reactors, and Non-Power Production or Utilization Facilities

This proposed rule would add new subpart, ''Small Modular Reactors, Non-Light-Water Reactors, and Non-power Production or Utilization Facilities,'' and new § 50.160, which would contain alternative EP requirements for SMRs, non-LWRs, and NPUFs.

Appendix E to Part 50—Emergency Planning and Preparedness for Production and Utilization Facilities

In appendix E to part 50, this proposed rule would clarify that the potential radiological hazards to the public associated with the operation of NPUFs and fuel facilities involve considerations different than those associated with power reactors.

Section 52.1 Definitions

In § 52.1, this proposed rule would revise the definition of *Major feature of the emergency plans* to include new § 50.160, as applicable.

Section 52.17 Contents of Applications; Technical Information

In § 52.17, this proposed rule would revise paragraph (b)(2) to include new § 50.160, as applicable.

Section 52.18 Standards for Review of Applications

This proposed rule would revise § 52.18 to include new § 50.160, as applicable.

Section 52.79 Contents of Applications; Technical Information in Final Safety Analysis Report

In § 52.79, this proposed rule would revise paragraph (a)(21) to require applicants for SMRs or non-LWRs to comply with either § 50.160 or § 50.47 and appendix E to 10 CFR part 50.

VI. Regulatory Flexibility Certification

As required by the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission certifies that this rule, if adopted, will not have a significant economic impact on a substantial number of small entities. This proposed rule affects only the licensing and operation of nuclear power facilities and NPUFs. The companies, universities, and government agencies that own these facilities do not fall within the scope of the definition of ''small entities'' set forth in the Regulatory Flexibility Act or the size standards established by the NRC (10 CFR 2.810).

VII. Regulatory Analysis

The NRC has prepared a draft regulatory analysis on this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the NRC. The conclusion from the analysis is that this proposed rule and associated guidance would result in net savings to the industry and the NRC of $5.89 million using a 7-percent discount rate and $9.71 million using a 3-percent discount rate. The NRC requests public comment on the draft regulatory analysis. The draft regulatory analysis is available as indicated in the ''Availability of Documents'' section of this document. Comments on the draft regulatory analysis may be submitted to the NRC as indicated under the **ADDRESSES** caption of this document.

VIII. Backfitting and Issue Finality

This proposed rule and implementing guidance would not be subject to the NRC's backfitting regulation at § 50.109, ''Backfitting,'' or issue finality regulations in 10 CFR part 52. This proposed rule would contain new alternative requirements for SMR and ONT applicants and licensees. Because these alternative requirements would not be imposed upon applicants and licensees and would not prohibit applicants and licensees from following existing requirements, the proposed requirements would not constitute backfitting or a violation of issue finality.

As described in section XV, ''Availability of Guidance,'' in this document, the NRC is issuing a draft regulatory guide (DG) that, if finalized, would provide guidance on the methods acceptable to the NRC for complying with aspects of this proposed rule. Issuance of the DG in final form would not constitute backfitting under § 50.109 and would not otherwise violate issue finality under 10 CFR part 52. As discussed in the ''Implementation''

section of the DG, the NRC has no current intention to impose the DG on holders of an operating license or COL.

Furthermore, in general, the backfitting provisions under 10 CFR part 50 and the issue finality provisions under 10 CFR part 52 do not apply to current or future applicants because neither the backfitting nor issue finality provisions were intended to apply to every NRC action that substantially changes the expectations of current and future applicants. Applicants have no reasonable expectation that future requirements will not change (''Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants; Final Rule,'' 54 FR 15372, at 15385–15386; April 18, 1989).

The exceptions to this general principle include a 10 CFR part 50 power reactor operating license applicant that references an NRC-issued construction permit, limited work authorization, or design certification rule with issue finality, or a 10 CFR part 52 applicant that references a 10 CFR part 52 license (*e.g.,* an ESP), an NRC regulatory approval (*e.g.,* a design certification rule), or both, with specified issue finality provisions. The NRC does not currently intend to impose the positions represented in the DG in a manner that would constitute backfitting or would be inconsistent with any issue finality provision of 10 CFR part 52. If, in the future, the NRC seeks to impose positions stated in the DG in a manner that would constitute backfitting or be inconsistent with an issue finality provision, the NRC would need to make the showing as set forth in § 50.109 or address the regulatory criteria set forth in the applicable issue finality provision, as applicable, that would allow the NRC to impose the position.

IX. Cumulative Effects of Regulation

The NRC is following its CER process by engaging with external stakeholders throughout this proposed rule and related regulatory activities. Public involvement has included: (1) A public meeting held on August 22, 2016, to request feedback from interested stakeholders on a potential performance-based approach for EP for SMRs and ONTs; (2) the publication of the draft regulatory basis for public comment (82 FR 17768) on March 15, 2017; (3) a public meeting held on May 10, 2017, to facilitate public comments on the development of the final regulatory basis; (4) a public meeting held on June 14, 2018 to discuss initiatives within the industry and NRC related to the development and licensing of non-LWRs, including the status of the proposed rule; and (5) an Advisory Committee on Reactor Safeguards Subcommittee meeting held on August 22, 2018 to discuss the proposed rule.

Another opportunity for public comment is provided to the public at this proposed rule stage. The NRC will be issuing the draft implementing guidance also for comment, along with this proposed rule to support more informed external stakeholder feedback. Further, the NRC will continue to hold public meetings throughout the rulemaking process. Section XV, ''Availability of Guidance,'' of this document describes how the public can access the draft implementing guidance for which the NRC seeks external stakeholder feedback.

In addition to the questions on the implementation of this proposed rule presented in the ''Specific Requests for Comments'' section of this document, the NRC is requesting CER feedback on the following questions:

1. In light of any current or projected CER challenges, does this proposed rule's effective date provide sufficient time to implement the new alternative proposed requirements, including changes to programs, procedures, and facilities?

2. If CER challenges currently exist or are expected, what should be done to address them? For example, if more time is required for implementation of the new alternative requirements, what period of time is sufficient?

3. Do other (NRC or other agency) regulatory actions (*e.g.,* orders, generic communications, license amendment requests, inspection findings of a generic nature) influence the implementation of this proposed rule's requirements?

4. Are there unintended consequences? Does this proposed rule create conditions that would be contrary to this proposed rule's purpose and objectives? If so, what are the unintended consequences, and how should they be addressed?

5. Please comment on the NRC's cost and benefit estimates in the draft regulatory analysis that supports this proposed rule. The draft regulatory analysis is available as indicated under the ''Availability of Documents'' section of this document.

X. Plain Writing

The Plain Writing Act of 2010 (Pub. L. 111–274) requires Federal agencies to write documents in a clear, concise, and well-organized manner. The NRC has written this document to be consistent with the Plain Writing Act as well as the Presidential Memorandum, ''Plain Language in Government Writing,'' published June 10, 1998 (63 FR 31883). The NRC requests comment on this document with respect to the clarity and effectiveness of the language used.

XI. Environmental Assessment and Proposed Finding of No Significant Impact

The Commission has determined under the National Environmental Policy Act of 1969, as amended, and the NRC's regulations in subpart A of 10 CFR part 51, that this proposed rule, if adopted, would not be a major Federal action significantly affecting the quality of the human environment, and an environmental impact statement is not required. The following sets forth the basis of this determination. This majority of the provisions in the proposed rule are administrative or procedural in nature and either would not affect the physical environment at all or would have no noticeable effects. Further, the NRC has evaluated proposed requirements of interest to stakeholders based on interactions described in section 6, ''Environmental Impacts of the Proposed Action,'' of this environmental assessment that have the potential to affect the human environment, including the scalable approach for determining the size of the plume exposure pathway EPZ under proposed § 50.33(g) and the ingestion response planning requirements under § 50.160(b)(4), and determined that this proposed rule would not have a significant environmental impact for the following reasons. Under the existing EP requirements and these proposed alternative EP requirements, the dose criteria under which predetermined protective actions would be taken (*e.g.,* evacuation, sheltering) would be similar under both rules, and therefore, the dose consequence to the public would be similar. The proposed ingestion response planning requirements under proposed § 50.160(b)(4), while not requiring SMR and ONT applicants and licensees to establish an IPZ, would provide the same capabilities available to identify and interdict contaminated food and water in the event of a radiological emergency as required under existing EP regulations. The environmental effects of the proposed ingestion response planning requirements are similar to that of the existing EP requirements. For these reasons, the NRC concludes that the proposed EPZ requirement under § 50.33(g) and ingestion response planning requirement under § 50.160(b)(4) would not have a

significant impact on the physical environment. Therefore, this rulemaking does not warrant preparation of an environmental impact statement. Accordingly, the NRC has determined that a Finding of No Significant Impact is appropriate.

Public stakeholders should note, however, that comments on any aspect of this environmental assessment may be submitted to the NRC as indicated under the **ADDRESSES** caption. The environmental assessment is available as indicated under the ''Availability of Documents'' section of this document.

The NRC has sent a copy of the environmental assessment and this proposed rule to each of the FEMA, EPA, Tribal Representatives, and State Liaison Officers, and has requested comment.

XII. Paperwork Reduction Act

This proposed rule contains new and amended collections of information subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This proposed rule has been submitted to the Office of Management and Budget (OMB) for review and approval of the information collections.

Type of submission, new or revision: Revision.

The title of the information collection: 10 CFR parts 50 and 52, Emergency Preparedness for Small Modular Reactors and Other New Technologies: Proposed Rule

The form number if applicable: Not Applicable.

How often the collection is required or requested: Emergency plans are submitted once at time of application. Once an EP program is implemented, EP records are updated quarterly and reports are submitted every eight years for drills and exercises. Records of the approved EP program, and any changes, are kept for the life of the license. Quarterly records of the EP performance objectives and metrics are kept for eight quarters.

Who will be required or asked to respond: SMR, non-LWR, and NPUF applicants and licensees.

An estimate of the number of annual responses: Part 50: decrease of 1 reporting response (the current number of recordkeepers remains the same does not change under the proposed rule). Part 52: the number of reporting responses remains the same (recordkeepers are captured under part 50).

The estimated number of annual respondents: Reporting: Part 50 = one respondent; Part 52 = one respondent. Three recordkeepers will maintain records under the current and proposed rule.

An estimate of the total number of hours needed annually to comply with the information collection requirement or request: Part 50: reduction of 2,407 hours (1,333 reporting + 1,074 recordkeeping). Part 52: reduction of 740 reporting hours.

Abstract: The proposed rule would provide SMR, non-LWR, and NPUF applicants or licensees that are regulated by 10 CFR part 50 or 10 CFR part 52, the alternative to submit for NRC approval a performance-based EP program to include a scalable EPZ and licensee-defined performance objectives and metrics data. If the EP program is approved by the NRC, the proposed rule would require the applicants or licensees to develop and maintain at the beginning of each calendar quarter a list of performance objectives for that calendar quarter. Each licensee would also maintain records showing the implemented performance objectives and associated metrics during each calendar quarter for the previous eight calendar quarters. The reports and recordkeeping requirements allow the NRC to evaluate the adequacy of the proposed EP program for approval and to assess the ongoing adequacy once implemented. The recordkeeping requirements allow the NRC to determine whether to take actions, such as to conduct inspections or to alert other licensees to prevent similar events that may have generic implications. The information is also used to update information in the NRC Emergency Operations Center used in support of an NRC response to an actual emergency, drill, or exercise.

The proposed rule would allow applicants and licensees to reduce their emergency plan information collection requirements compared to the current framework based on the potential for smaller EPZs and the reduction in license amendments and exemptions. The submission of emergency plans to the NRC is required in order to allow the NRC to determine that the emergency plans and EP continue to provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

The NRC is seeking public comment on the potential impact of the information collection(s) contained in this proposed rule and on the following issues:

1. Is the proposed information collection necessary for the proper performance of the functions of the NRC, including whether the information will have practical utility?

2. Is the estimate of the burden of the proposed information collection accurate?

3. Is there a way to enhance the quality, utility, and clarity of the information to be collected?

4. How can the burden of the proposed information collection on respondents be minimized, including the use of automated collection techniques or other forms of information technology?

A copy of the OMB clearance package is available in ADAMS under Accession No. ML18134A086. You may obtain information and comment submissions related to the OMB clearance package by searching on *https://www.regulations.gov* under Docket ID NRC–2015–0225.

You may submit comments on any aspect of these proposed information collection(s), including suggestions for reducing the burden and on the above issues, by the following methods:

- *Federal Rulemaking Website:* Go to *https://www.regulations.gov* and search for Docket ID NRC–2015–0225.
- *Mail comments to:* Information Services Branch: T6–A10M, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, or by email to *Infocollects.Resource@nrc.gov.*
- *Submit to OMB Directly:* Written comments and recommendations for the proposed information collection should be sent within 60 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* You may find this particular information collection by selecting ''Currently Under Review—Open for Public Comments'' or by using the search function. Comments on the information collections will be publicly available in ADAMS and on *Reginfo.gov*.

Submit comments by July 27, 2020. Comments received after this date will be considered if it is practical to do so, but the NRC is able to ensure consideration only for comments received on or before this date.

Public Protection Notification

The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

XIII. Criminal Penalties

For the purposes of Section 223 of the AEA, the NRC is issuing this proposed rule that would amend or create §§ 50.2, 50.8, 50.10, 50.33, 50.34, 50.47, 50.54, 50.160, 52.1, 52.17, 52.18, 52.79, and appendix E to 10 CFR part 50 under one or more of Sections 161b, 161i, or 161o

of the AEA. Willful violations of the rule would be subject to criminal enforcement. Criminal penalties as they apply to regulations in 10 CFR parts 50 and 52 are discussed in §§ 50.111 and 52.303.

XIV. Voluntary Consensus Standards

The National Technology Transfer and Advancement Act of 1995, Pub. L. 104–113, requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or otherwise impractical. The NRC did not endorse any consensus standards for use in this proposed rule. In this proposed rule, the NRC will revise regulations associated with emergency preparedness in 10 CFR parts 50 and 52. This action does not constitute the establishment of a standard that contains generally applicable requirements.

XV. Availability of Guidance

The NRC is issuing for comment new draft guidance, DG–1350, ''Performance-Based Emergency Preparedness for Small Modular Reactors, Non-Light-Water Reactors, and Non-power Production or Utilization Facilities,'' that will support implementation of the requirements in this proposed rule. The guidance is available in ADAMS under Accession No. ML18082A044. You may obtain information and comment submissions related to the draft guidance by searching on *https://www.regulations.gov* under Docket ID NRC–2015–0225.

The guidance document is intended for use by applicants, licensees, and NRC staff, and describes an approach and method acceptable for implementing the requirements of the regulations. As a guidance document, DG–1350 does not establish additional requirements, and applicants and licensees are able to propose alternative ways for demonstrating compliance with the requirements in proposed § 50.160.

You may submit comments on this draft regulatory guidance by the methods provided in the **ADDRESSES** section of this document.

XVI. Public Meeting

The NRC will conduct a public meeting to explain the changes in this proposed rule and to answer questions from the attendees to facilitate the development of public comments.

The NRC will publish a notice of the location, time, and agenda of the meeting on *http://www.regulations.gov* and on the NRC's public meeting website within at least 10 calendar days before the meeting. Stakeholders should monitor the NRC's public meeting website for information about the public meeting at: *https://www.nrc.gov/public-involve/public-meetings/index.cfm.*

XVII. Availability of Documents

The documents identified in the following table are available to interested persons through one or more of the following methods, as indicated.

Document	ADAMS Accession No./web link/**Federal Register** citation
Draft Regulatory Analysis, ''Emergency Preparedness for Small Modular Reactors and Other New Technologies Proposed Rule—Draft Regulatory Analysis''.	ML18134A077.
Draft Environmental Assessment, ''Emergency Preparedness for Small Modular Reactors and Other New Technologies''.	ML18134A079.
Draft Information Collection Clearance Package	ML18184A308. ML18184A309.
Draft Regulatory Guide DG–1350, ''Performance-Based Emergency Preparedness for Small Modular Reactors, Non-Light-Water Reactors, and Non-power Production or Utilization Facilities''.	ML18082A044.
NUREG–0396, ''Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light-water Nuclear Power Plans,'' December 1978.	ML051390356.
NUREG–0849, ''Standard Review Plan for the Review and Evaluation of Emergency Plans for Research and Test Reactors,'' October 1983.	ML062190191.
NUREG–1537, Part 1, ''Guidelines for Preparing and Reviewing Applications for the Licensing of Non-power Reactors, Format and Content,'' February 1996.	ML042430055.
NUREG–1537, Part 2, ''Guidelines for Preparing and Reviewing Applications for the Licensing of Non-power Reactors, Standard Review Plan and Acceptance Criteria,'' February 1996.	ML042430048.
Interim Staff Guidance for NUREG–1537, ''Final Interim Staff Guidance Augmenting NUREG–1537, Part 1, 'Guidelines for Preparing and Reviewing Applications for the Licensing of Non-power Reactors, Format and Content' for Licensing Radioisotope Production Facilities and Aqueous Homogenous Reactors,'' October 12, 2012.	ML12156A069.
Final Interim Guidance for NUREG–1537, ''Final Interim Staff Guidance Augmenting NUREG–1537, Part 2, 'Guidelines for Preparing and Reviewing Applications for the Licensing of Non-power Reactors, Standard Review Plan and Acceptance Criteria' for Licensing Radioisotope Production Facilities and Aqueous Homogenous Reactors,'' October 17, 2012.	ML12156A075.
NUREG–1520, ''Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility,'' Revision 1, May 1, 2010.	ML101390110.
NUREG–1226, ''Development and Utilization of the NRC Policy Statement on the Regulation of Advanced Nuclear Power Plants,'' June 1988.	ML13253A431.
NUREG–0654/FEMA–REP–1, Revision 1, ''Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants,'' November 1980.	ML040420012.
SECY–93–092, ''Issues Pertaining to the Advanced Reactor (RISM, MHTGR, and PIUS) and CANDU 3 Designs and Their Relationship to Current Regulatory Requirements,'' April 8, 1993.	ML040210725.
SECY–97–020, ''Results of Evaluation of Emergency Planning for Evolutionary and Advanced Reactors,'' January 27, 1997.	ML992920024.

Document	ADAMS Accession No./web link/**Federal Register** citation
SECY–04–0236, ''Southern Nuclear Operation Company's Proposal to Establish a Common Emergency Operating Facility at its Corporate Headquarters,'' December 23, 2004.	ML042590576.
SECY–06–0200, ''Results of the Review of Emergency Preparedness Regulations and Guidance,'' September 20, 2006.	ML061910707.
SECY–10–0034, ''Potential Policy, Licensing, and Key Technical Issues for Small Modular Reactor Designs,'' March 28, 2010.	ML093290268.
SECY–11–0152, ''Development of an Emergency Planning and Preparedness Framework for Small Module Reactors,'' October 28, 2011.	ML112570439.
SECY–14–0066, ''Request by Dominion Energy Kewaunee Inc., for Exemptions from Certain Emergency Planning Requirements,'' June 27, 2014.	ML14072A257.
SECY–14–0118, ''Request by Duke Energy Florida, Inc., for Exemptions from Certain Emergency Planning Requirements,'' October 29, 2014.	ML14219A444.
SECY–14–0038, ''Performance-Based Framework for Nuclear Power Plant Emergency Preparedness Oversight,'' April 4, 2014.	ML13238A018.
SECY–15–0077, ''Options for Emergency Preparedness for Small Module Reactors and Other New Technologies,'' May 29, 2015.	ML15037A176.
SECY–16–0069, ''Rulemaking Plan on Emergency Preparedness for Small Module Reactors and Other New Technologies,'' May 31, 2016.	ML16020A388.
SRM–SECY–93–092, ''Staff Requirements—SECY–93–092—Issues Pertaining to the Advanced Reactor (PRISM, MHTGR, and PIUS) and CANDU 3 Designs and Their Relationship to Current Regulatory Requirements,'' July 30, 1993.	ML003760774.
SRM–SECY–04–0236, ''Staff Requirements—SECY–04–0236—Southern Nuclear Operating Company's Proposal to Establish a Common Emergency Operating Facility at its Corporate Headquarters,'' February 23, 2005.	ML050550131.
SRM–SECY–06–0200, ''Staff Requirements—Results of the Review of Emergency Preparedness Regulations and Guidance,'' January 8, 2007.	ML070080411.
SRM–SECY–14–0038, ''Staff Requirements—SECY–14–0038—Performance-Based Framework for Nuclear Power Plant Emergency Preparedness Oversight,'' September 16, 2014.	ML14259A589.
SRM–SECY–15–0077, ''Staff Requirements—SECY–15–0077—Options for Emergency Preparedness for Small Module Reactors and Other New Technologies,'' August 4, 2015.	ML15216A492.
SRM–SECY–16–0069, ''Staff Requirements—Rulemaking Plan on Emergency Preparedness for Small Module Reactors and Other New Technologies,'' June 22, 2016.	ML16174A166.
''Memorandum of Understanding Between the Department of Homeland Security/Federal Emergency Management Agency and Nuclear Regulatory Commission Regarding Radiological Emergency Response, Planning, and Preparedness,'' December 7, 2015.	ML15333A371.
''Emergency Planning and Preparedness,'' Final Rule, July 13, 1982	47 FR 30232.
''NRC Vision and Strategy: Safely Achieving Effective and Efficient Non-Light-Water Reactor Mission Readiness,'' December 2016.	ML16356A670.
''Enhancements to Emergency Preparedness Regulations,'' Final Rule, November 23, 2011.	76 FR 72559.
Regulatory Basis for Regulatory Improvements for Power Reactors Transitioning to Decommissioning Rulemaking, November 27, 2017.	82 FR 55954.
SECY–18–0055, ''Proposed Rule: Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning,'' May 22, 2018.	ML18012A019.
Regulatory Guide (RG) 2.6, ''Emergency Planning for Research Reactors,'' January 1979.	ML12184A008.
RG 2.6, ''Emergency Planning for Research and Test Reactors and Other Non-power Production and Utilization Facilities,'' September 2017.	ML17263A472.
''Specific Exemptions; Clarification of Standards,'' December 12, 1985	50 FR 50764.
''Regulation of Advanced Nuclear Power Plants, Statement of Policy,'' July 8, 1986.	51 FR 24643.
''Policy Statement on Regulation of Advanced Reactors,'' October 14, 2008	73 FR 60612.
EP for Small Modular Reactors and Other New Technologies, Draft Regulatory Basis, April 13, 2017.	82 FR 17768.
EP for Small Modular Reactors and Other New Technologies, Regulatory Basis, November 15, 2017.	82 FR 52862.
Variable Annual Fee Structure for Small Modular Reactors, Proposed Rule, November 4, 2015.	80 FR 68268.
Variable Annual Fee Structure for Small Modular Reactors, Final Rule, May 24, 2016.	81 FR 32617.
NEI White Paper, ''White Paper: Proposed Methodology and Criteria Establishing the Technical Basis for Small Modular Reactor Emergency Planning Zone,'' 2013.	ML13364A345.
NEI White Paper ''Proposed Emergency Preparedness Regulations and Guidance for Small Modular Reactors Facilities,'' July 2015.	ML15194A276.
''Summary of September 1–2, 2015, Nuclear Regulatory Commission and Department of Energy Co-Hosted Workshop on Advanced Non-Light-Water Reactors,'' October 15, 2015.	ML15265A165.

Document	ADAMS Accession No./web link/**Federal Register** citation
"Summary of June 7–8, 2015, Department of Energy and Nuclear Regulatory Commission Co-Hosted Workshop on Advanced Non-Light-Water Reactors," July 7, 2015.	ML16188A226.
EPA–520/1–75–001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," September, 1975.	*https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=9101AK8V.PDF.*
EPA–400–R–92–001, "Manual of Protection Action Guides and Protective Actions for Nuclear Incidents," May 1992.	*https://www.epa.gov/sites/production/files/2016-03/documents/pags.pdf.*
EPA–400/R–17/001, "PAG Manual: Protective Action Guides and Planning Guidance for Radiological Incidents," January 2017.	*https://www.epa.gov/sites/production/files/2017-01/documents/epa_pag_manual_final_revisions_01-11-2017_cover_disclaimer_8.pdf.*
NEI 99–02, "Regulatory Assessment Performance Indicator Guideline," Revision 7, August 13, 2013.	ML13261A116.
FEMA–NC MOU re: Radiological Emergency Response, Planning, and Preparedness, dated December 7, 2015.	ML15344A371.
"Generalized Dose Assessment Methodology for Informing Emergency Planning Zone Size Determinations," June 2018.	ML18064A317.
"Required Analyses for Informing Emergency Planning Zone Size Determinations," June 2018.	ML18114A176.
Homeland Security Presidential Directive 5, "Management of Domestic Incidents," February 28, 2003.	*https://www.dhs.gov/publication/homeland-security-presidential-directive-5.*
Presidential Policy Directive (PPD)-8, "National Preparedness," March 30, 2011 ..	*https://www.dhs.gov/presidential-policy-directive-8-national-preparedness.*
Nuclear Innovation Alliance "Enabling Nuclear Innovation: Strategies for Advanced Reactor Licensing," June 7, 2016.	*https://docs.wixstatic.com/ugd/5b05b3_71d4011545234838aa27005ab7d757f1.pdf.*
American National Standards Institute/American Society Standard (ANSI/ANS) 15.16—2015. "Emergency Planning for Research Reactors," American Nuclear Society, La Grange Park, IL, February 2015.	*http://www.ans.org/store/item-240305/.*
"Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants, Final Rule," April 18, 1989.	54 FR 15372.
"Summary of August 22, 2016, Public Meeting to Discuss a Performance-Based Approach to Emergency Preparedness for Small Modular Reactors and Other New Technologies," September 15, 2016.	ML16257A510.
"Summary of May 10, 2017, Public Meeting on the Draft Regulatory Basis for the Rulemaking for Emergency Preparedness for Small Modular Reactors and Other New Technologies," May 24, 2017.	ML17139C860.
NUREG/CR–7248, "Capabilities and Practices of Offsite Response Organizations for Protective Actions in the Intermediate Phase of a Radiological Emergency," June 2018.	ML18170A043.
"10 CFR Parts 50 and 70, Emergency Planning; Final Rule," August 19, 1980	45 FR 55402.
SECY–19–0062, "Final Rule: Non-power Production or Utilization Facility License Renewal," June 17, 2019.	ML18031A000.

Throughout the development of this proposed rule, the NRC may post documents related to this rule, including public comments, on the Federal rulemaking website at *https://www.regulations.gov* under Docket ID NRC–2015–0225. The Federal rulemaking website allows you to receive alerts when changes or additions occur in a docket folder. To subscribe: (1) Navigate to the docket folder (NRC–2015–0225); (2) click the "Sign up for Email Alerts" link; and (3) enter your email address and select how frequently you would like to receive emails (daily, weekly, or monthly).

List of Subjects

10 CFR Part 50

Administrative practice and procedure, Antitrust, Backfitting, Classified information, Criminal penalties, Education, Emergency planning, Fire prevention, Fire protection, Incorporation by reference, Intergovernmental relations, Nuclear power plants and reactors, Penalties, Radiation protection, Reactor siting criteria, Reporting and recordkeeping requirements, Whistleblowing.

10 CFR Part 52

Administrative practice and procedure, Antitrust, Combined license, Early site permit, Emergency planning, Fees, Incorporation by reference, Inspection, Issue finality, Limited work authorization, Nuclear power plants and reactors, Probabilistic risk assessment, Prototype, Reactor siting criteria, Redress of site, Penalties, Reporting and recordkeeping requirements, Standard design, Standard design certification.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 552 and 553, the NRC is proposing to adopt the following amendments to 10 CFR parts 50 and 52:

PART 50—DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

■ 1. The authority citation for part 50 continues to read as follows:

Authority: Atomic Energy Act of 1954, secs. 11, 101, 102, 103, 104, 105, 108, 122, 147, 149, 161, 181, 182, 183, 184, 185, 186, 187, 189, 223, 234 (42 U.S.C. 2014, 2131, 2132, 2133, 2134, 2135, 2138, 2152, 2167, 2169, 2201, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2239, 2273, 2282); Energy Reorganization Act of 1974, secs. 201, 202, 206, 211 (42 U.S.C. 5841, 5842, 5846, 5851); Nuclear Waste Policy Act of 1982, sec. 306 (42 U.S.C. 10226); National Environmental Policy Act of 1969 (42 U.S.C. 4332); 44 U.S.C. 3504 note; Sec. 109, Pub. L. 96–295, 94 Stat. 783.

■ 2. In § 50.2, add in alphabetical order the definitions for "*Non-light-water reactor*", "*Non-power production or utilization facility*", and "*Small modular reactor*" to read as follows:

§ 50.2 Definitions.

* * * * *

Non-light-water reactor means a nuclear power reactor using a coolant other than light water.

Non-power production or utilization facility means a production or utilization facility, licensed under § 50.21(a) and (c), or § 50.22, as applicable, that is not a nuclear power reactor or a production facility as defined under paragraphs (1) and (2) of the definition of *Production facility* in this section.

* * * * *

Small modular reactor means a power reactor, licensed under § 50.21 or § 50.22 to produce heat energy up to 1,000 megawatts-thermal, which may be of modular design as defined in § 52.1 of this chapter.

* * * * *

§ 50.8 [Amended]

■ 3. In § 50.8(b), add ''50.160'' after ''50.155''.

■ 4. In § 50.10, revise paragraph (a)(1)(vii) to read as follows:

§ 50.10 License required; limited work authorization.

(a) * * *

(1) * * *

(vii) Onsite emergency facilities necessary to comply with either § 50.160 or § 50.47 and appendix E to this part, as applicable.

* * * * *

■ 5. In § 50.33, revise paragraph (g) to read as follows:

§ 50.33 Contents of applications; general information.

* * * * *

(g)(1) Except as provided in paragraph (g)(2) of this section, if the application is for an operating license or combined license for a nuclear power reactor, or if the application is for an early site permit and contains plans for coping with emergencies under § 52.17(b)(2)(ii) of this chapter, the applicant shall submit radiological emergency response plans of State and local governmental entities in the United States that are wholly or partially within the plume exposure pathway emergency planning zone (EPZ),[4] as well as the plans of State governments wholly or partially within the ingestion pathway EPZ.[5] If the application is for an early site permit that, under 10 CFR 52.17(b)(2)(i), proposes major features of the emergency plans describing the EPZs, then the descriptions of the EPZs must meet the requirements of this paragraph. Generally, the plume exposure pathway EPZ for nuclear power reactors shall consist of an area about 10 miles (16 km) in radius and the ingestion pathway EPZ shall consist of an area about 50 miles (80 km) in radius. The exact size and configuration of the EPZs surrounding a particular nuclear power reactor shall be determined in relation to the local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries. The size of the EPZs also may be determined on a case-by-case basis for gas-cooled reactors and for reactors with an authorized power level less than 250 MW thermal. The plans for the ingestion pathway shall focus on such actions as are appropriate to protect the food ingestion pathway.

* * * * *

[4] Emergency planning zones (EPZs) are discussed in NUREG–0396, EPA 520/1–78–016, ''Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light-Water Nuclear Power Plants,'' December 1978.

* * * * *

[5] If the State and local emergency response plans have been previously provided to the NRC for inclusion in the facility docket, the applicant need only provide the appropriate reference to meet this requirement.

* * * * *

(2) Small modular reactor, non-light-water reactor, or non-power production or utilization facility applicants complying with § 50.160 who apply for a construction permit or an operating license under this part, or small modular reactor or non-light-water reactor applicants complying with § 50.160 who apply for a combined license or an early site permit under part 52 of this chapter, must submit as part of the application the analysis used to establish the size of the plume exposure pathway EPZ. The plume exposure pathway EPZ is determined as the area within which public dose, as defined in § 20.1003 of this chapter, is projected to exceed 10 mSv [1 rem] total effective dose equivalent over 96 hours from the release of radioactive materials, resulting from a spectrum of credible accidents for the facility.

(i) If the application is for an operating license or combined license or if the application is for an early site permit and contains plans for coping with emergencies under § 52.17(b)(2)(ii) of this chapter, and if the plume exposure pathway EPZ extends beyond the site boundary:

(A) The applicant shall submit radiological emergency response plans of Tribal, State, and local governmental entities in the United States that are wholly or partially within the plume exposure pathway EPZ.

(B) The exact configuration of the plume exposure pathway EPZ surrounding the facility shall be determined in relation to the local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries.

(ii) If the application is for an early site permit that, under § 52.17(b)(2)(i) of this chapter, proposes major features of the emergency plans and describes the EPZ, and if the EPZ extends beyond the site boundary, then the exact configuration of the plume exposure pathway EPZ surrounding the facility shall be determined in relation to the local emergency response needs and capabilities as they are affected by such conditions as demography, topography, land characteristics, access routes, and jurisdictional boundaries.

* * * * *

■ 6. In § 50.34, revise paragraphs (a)(10) and (b)(6)(v) to read as follows:

§ 50.34 Contents of applications; technical information.

(a) * * *

(10) A discussion of the applicant's preliminary plans for coping with emergencies based on:

(i) Except as provided in paragraph (a)(10)(ii) of this section, the requirements in appendix E to this part.

(ii) For a small modular reactor, a non-light-water reactor, or non-power production or utilization facility construction permit applicant, the requirements in either § 50.160 or appendix E to this part.

* * * * *

(b) * * *

(6) * * *

(v) Plans for coping with emergencies based on:

(A) Except as provided in paragraph (b)(6)(v)(B) of this section, the requirements in appendix E to this part.

(B) For a small modular reactor, a non-light-water reactor, or a non-power production or utilization facility operating license applicant, the requirements in either § 50.160 or appendix E to this part.

* * * * *

■ 7. In § 50.47, revise paragraph (b) introductory text and add paragraph (f).

The revision and addition read as follows:

§ 50.47 Emergency plans.

* * * * *

(b) The onsite and, except as provided in paragraphs (d) and (f) of this section, offsite emergency response plans for

nuclear power reactors must meet the following standards:

* * * * *

(f) Paragraphs (a)(2) and (b) of this section do not apply to offsite radiological emergency response plans if the licensee's emergency plan is not required to meet these planning standards or if the plume exposure pathway EPZ does not extend beyond the site boundary.

■ 8. In § 50.54:

■ a. Revise paragraphs (q)(1)(iii) and (q)(2) through (4);

■ b. In paragraph (q)(5), remove the words ''made after February 21, 2012'';

■ c. Add paragraph (q)(7);

■ d. In paragraph (s)(2)(ii), remove the words ''after April 1, 1981,'', remove the word ''reactor'' and add in its place the word ''facility'', and add the words ''or cease operation'' after the words ''shut down'';

■ e. In paragraph (s)(3), remove the words ''The NRC'' and add in their place the words ''If the planning standards for radiological emergency preparedness apply to offsite emergency response plans, or if the planning activities in § 50.160(b)(1)(iv)(B) of this part apply, the NRC''; and

■ f. Revise paragraph (gg)(1).

The addition and revisions read as follows:

§ 50.54 Conditions of licenses.

* * * * *

(q) * * *

(1) * * *

(iii) *Emergency planning function* means a capability or resource necessary to prepare for and respond to a radiological emergency.

* * * * *

(2)(i) Except as provided in paragraph (q)(2)(ii) of this section, a holder of a license under this part, or a combined license under part 52 of this chapter after the Commission makes the finding under § 52.103(g) of this chapter, shall follow and maintain the effectiveness of an emergency plan that meets the requirements in appendix E to this part and, for nuclear power reactor licensees, the planning standards of § 50.47(b).

(ii) A holder of a license under this part for a non-power production or utilization facility, a holder of a license under this part for a small modular reactor or a non-light-water reactor, or a holder of a combined license under part 52 of this chapter after the Commission makes the finding under § 52.103(g) of this chapter for a small modular reactor or a non-light-water reactor, shall follow and maintain the effectiveness of an emergency plan that meets the requirements in either § 50.160 or appendix E to this part and, except for a holder of a license under this part for a non-power production or utilization facility, the planning standards of § 50.47(b).

(3)(i) Except as provided in paragraph (q)(3)(ii) of this section, the licensee may make changes to its emergency plan without NRC approval only if the licensee performs and retains an analysis demonstrating that the changes do not reduce the effectiveness of the plan and the plan, as changed, continues to meet the requirements in appendix E to this part and, for nuclear power reactor licensees, the planning standards of § 50.47(b).

(ii) A non-power production or utilization facility, small modular reactor, or non-light-water reactor licensee may make changes to its emergency plan without NRC approval only if the licensee performs and retains an analysis demonstrating that the changes do not reduce the effectiveness of the plan and the plan, as changed, continues to meet the requirements in either § 50.160 or appendix E to this part and, except for a non-power production or utilization facility licensee, the planning standards of § 50.47(b).

(4) The changes to a licensee's emergency plan that reduce the effectiveness of the plan as defined in paragraph (q)(1)(iv) of this section may not be implemented without prior approval by the NRC. A licensee desiring to make such a change shall submit an application for an amendment to its license. In addition to the filing requirements of §§ 50.90 and 50.91, the request must include all emergency plan pages affected by that change and must be accompanied by a forwarding letter identifying the change, the reason for the change, and the basis for concluding that the licensee's emergency plan, as revised, will continue to meet the requirements in either § 50.160 or, appendix E to this part and, for nuclear power reactor licensees, the planning standards of § 50.47(b).

(5) The licensee shall retain a record of each change to the emergency plan made without prior NRC approval for a period of three years from the date of the change and shall submit, as specified in § 50.4, a report of each such change made, including a summary of its analysis, within 30 days after the change is put in effect.

* * * * *

(q)(7) Each holder of an operating license under this part or a combined license under 10 CFR part 52 for a small modular reactor or non-light-water reactor or each holder of an operating license under this part issued after *[Date 30 Days After Date of Publication of the Final Rule in the Federal Register]* for a non-power production or utilization facility that wishes to transition to § 50.160 shall submit to the Commission, as specified in § 50.90, a license amendment request for implementing an emergency preparedness program with the associated plan modification necessary to meet the requirements of § 50.160(b). This submittal must include an explanation of the schedule and analyses supporting the implementation of the emergency preparedness program.

* * * * *

(gg)(1) Notwithstanding 10 CFR 52.103, if, following the conduct of the exercise required by either paragraph IV.f.2.a of appendix E to this part or § 50.160(c)(2), as applicable, FEMA identifies one or more deficiencies in the state of offsite emergency preparedness, the holder of a combined license under part 52 of this chapter may operate at up to 5 percent of rated thermal power only if the Commission finds that the state of onsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The NRC will base this finding on its assessment of the applicant's onsite emergency plans against the pertinent standards in either § 50.47 and appendix E to this part or § 50.160, as applicable. Review of the applicant's emergency plans will include the following standards with offsite aspects:

* * * * *

■ 9. Add undesignated center heading ''Small Modular Reactors, Non-Light-Water Reactors, and Non-power Production or Utilization Facilities: and § 50.160 to read as follows:

Small Modular Reactors, Non-Light-Water Reactors, and Non-Power Production or Utilization Facilities

§ 50.160 Emergency preparedness for small modular reactors, non-light water-reactors, and non-power production or utilization facilities.

(a) *Definitions.* For the purpose of this section:

(1) *Site boundary* means site boundary as defined in § 20.1003 of this chapter.

(2) [Reserved]

(b) *Requirements.* The emergency plan shall contain information needed to demonstrate compliance with the elements set forth in this paragraph. The NRC will not issue an initial operating license to a licensee unless a finding is

made by the NRC that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. No finding under this section is necessary for issuance of a renewed power reactor operating license.

(1) *Performance-based framework.* Demonstrate effective response in drills and exercises for emergency and accident conditions.

(i) *Maintenance of performance.* Maintain in effect preparedness to respond to emergency and accident conditions and describe in an emergency plan the provisions to be employed to maintain preparedness;

(ii) *Performance objectives.* (A) By the beginning of each calendar quarter, develop and maintain a complete list of performance objectives for that calendar quarter; and

(B) Maintain records showing the implemented performance objectives and associated metrics during each calendar quarter for the previous eight calendar quarters;

(iii) *Emergency response performance.* The emergency response team must have sufficient capability to demonstrate the following emergency response functions using drills or exercises:

(A) *Event classification and mitigation.* Assess, classify, monitor, and repair facility malfunctions in accordance with the emergency plan to return the facility to safe conditions.

(B) *Protective actions.* Implement and maintain protective actions for onsite personnel for emergency conditions, and recommend protective actions to offsite authorities as conditions warrant.

(C) *Communications.* Establish and maintain effective communications with the emergency response organization, and make notifications to response personnel and organizations who may have responsibilities for responding during emergencies.

(D) *Command and control.* Establish and maintain effective command and control for emergencies by using a supporting organizational structure with defined roles, responsibilities, and authorities for directing and performing emergency response functions as described in paragraph (b) of this section.

(E) *Staffing and operations.* Establish staffing for the facility necessary to implement the roles and responsibilities in this paragraph.

(F) *Radiological assessment.* Assess radiological conditions in and around the facility during emergencies, including:

(*1*) *Radiological conditions.* Assess, monitor, and report radiological conditions to the response organization using installed or portable equipment.

(*2*) *Protective equipment.* Issue and use protective equipment necessary to continue and expand mitigation and protective action strategies.

(*3*) *Core or vessel damage.* Assess, monitor, and report to the response organization the extent and magnitude of damage to the core or other vessel containing irradiated special nuclear material, such as fuel or targets, as applicable.

(*4*) *Releases.* Assess, monitor, and report to the response organization the extent and magnitude of all radiological releases, including releases of hazardous chemicals produced from licensed material.

(G) *Reentry.* Develop and implement reentry plans for accessing the facility after emergencies.

(H) *Critique and corrective actions.* Critique emergency response functions and implement corrective actions after drills and exercises, and after emergencies, if they occur.

(iv) *Planning activities.*

(A) Maintain the capability to:

(*1*) Prepare and issue public information during emergencies.

(*2*) Implement the NRC-approved emergency response plan in conjunction with the licensee's Safeguards Contingency Plan.

(*3*) Establish voice and data communications with the NRC for emergencies.

(*4*) Establish an emergency facility or facilities from which effective direction can be given and effective control can be exercised during an emergency, with capabilities to support the emergency response functions as described in paragraph (b) of this section.

(B) For a plume exposure pathway EPZ that extends beyond the site boundary, the emergency plan must describe:

(*1*) The contacts and arrangements made and documented with local, State, Tribal and Federal governmental agencies, as applicable, with responsibilities for coping with emergencies, including the identification of the principal coordinating agencies, and the coordinated reviews of changes in offsite and onsite planning and preparation;

(*2*) Offsite organizations responsible for coping with emergencies and the means of notifying, in the event of an emergency, persons assigned to the emergency organizations, including the means of validating notifications, the time period by which notifications must be completed, and primary and secondary methods to complete notification;

(*3*) The protective measures to be taken within the EPZ to protect the health and safety of the public in the event of an emergency, including the procedures by which the protective measures are implemented, maintained, and discontinued;

(*4*) The site familiarization training for any offsite organization that may respond to the site in the event of an emergency;

(*5*) An evacuation time estimate of the areas beyond the site boundary and within the EPZ;

(*6*) The offsite facility and any backup facilities to coordinate the onsite response with the offsite response;

(*7*) The means of making offsite dose projections and the means of communicating the offsite dose projections to the offsite response coordinating agencies;

(*8*) The means by which public information is provided to the members of the public concerning emergency planning information, public alert notification system, and any prompt actions that need to be taken by the public;

(*9*) The general plans and methods to allow entry into the EPZ during and after an emergency;

(*10*) The drill and exercise program that tests and implements major portions of planning, preparations, and the coordinated response by the onsite response organizations with the offsite response organization within the EPZ without mandatory public participation; and

(*11*) The methods for maintaining the emergency plan, contacts and arrangements, procedures, and evacuation time estimate up to date, including periodic reviews by the onsite and offsite organizations.

(2) *Hazard analysis.* Conduct a hazard analysis of any contiguous or nearby facility, such as industrial, military, and transportation facilities, and include any credible hazard into the licensee's emergency preparedness program that would adversely impact the implementation of emergency plans.

(3) *Emergency planning zone.* Determine and describe the boundary and physical characteristics of the EPZ in the emergency plan.

(4) *Ingestion response planning.* Describe or reference in the emergency plan the capabilities that provide actions to protect contaminated food and water from entering into the ingestion pathway.

(c) *Implementation.* (1) An applicant for an operating license issued under

this part after [Date 30 Days After Date of Publication of the Final Rule in the Federal Register] must establish, implement, and maintain an emergency preparedness program that meets the requirements of paragraph (b) of this section, as described in the emergency plan and license, and conduct an initial exercise to demonstrate this compliance no later than 18 months before the issuance of an operating license for the facility described in the license application.

(2) A holder of a combined license issued under part 52 of this chapter before the Commission has made the finding under § 52.103(g) of this chapter, must establish, implement, and maintain an emergency preparedness program that meets the requirements of paragraph (b) of this section, as described in the approved emergency plan and license, and conduct an initial exercise to demonstrate this compliance no later than 18 months before the scheduled date for initial loading of fuel.

■ 10. In appendix E to part 50, revise paragraph I.3. and footnote 2 to I.3 to read as follows:

APPENDIX E TO PART 50—EMERGENCY PLANNING AND PREPAREDNESS FOR PRODUCTION AND UTILIZATION FACILITIES

I. * * *

■ 3. The potential radiological hazards to the public associated with the operation of non-power production or utilization facilities licensed under 10 CFR part 50 and fuel facilities licensed under 10 CFR part 70 involve considerations different than those associated with nuclear power reactors. Consequently, the size of Emergency Planning Zones [1] (EPZs) for facilities other than power reactors and the degree to which compliance with the requirements of this section and sections II, III, IV, and V of this appendix as necessary will be determined on a case-by-case basis.[2]

* * * * *

[2] Regulatory Guide 2.6, ''Emergency Planning for Research and Test Reactors and Other Non-power Production and Utilization Facilities,'' may be used as guidance for the acceptability of non-power production or utilization facility emergency response plans.

* * * * *

PART 52—LICENSES, CERTIFICATIONS, AND APPROVALS FOR NUCLEAR POWER PLANTS

■ 11. The authority citation for part 52 continues to read as follows:

Authority: Atomic Energy Act of 1954, secs. 11, 101, 102, 103, 104, 105, 108, 122, 147, 149, 161, 181, 182, 183, 184, 185, 186, 187, 189, 223, 234 (42 U.S.C. 2014, 2131, 2132, 2133, 2134, 2135, 2138, 2152, 2167, 2169, 2201, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2239, 2273, 2282); Energy Reorganization Act of 1974, secs. 201, 202, 206, 211 (42 U.S.C. 5841, 5842, 5846, 5851); Nuclear Waste Policy Act of 1982, sec. 306 (42 U.S.C. 10226); National Environmental Policy Act of 1969 (42 U.S.C. 4332); 44 U.S.C. 3504 note; Sec. 109, Pub. L. 96–295, 94 Stat. 783.

■ 12. In § 52.1, revise the definition of ''*Major feature of the emergency plans*'' to read as follows:

§ 52.1 Definitions.

* * * * *

Major feature of the emergency plans means an aspect of those plans necessary to:

(i) Address in whole or part either one or more of the 16 standards in 10 CFR 50.47(b) or the requirements of 10 CFR 50.160(b), as applicable; or

(ii) Describe the emergency planning zones as required in 10 CFR 50.33(g).

* * * * *

■ 13. In § 52.17, revise paragraph (b)(2) to read as follows:

§ 52.17 Contents of applications; technical information.

* * * * *

(b) * * *

(2) * * *

(i) Propose major features of the emergency plans, in accordance with either the pertinent standards of § 50.47 of this chapter and the requirements of appendix E to part 50 of this chapter, or § 50.160 of this chapter, as applicable, such as the exact size and configuration of the emergency planning zones, for review and approval by the NRC, in consultation with the Federal Emergency Management Agency (FEMA), as applicable, in the absence of complete and integrated emergency plans; or

(ii) Propose complete and integrated emergency plans for review and approval by the NRC, in consultation with FEMA, as applicable in accordance with either the applicable standards of § 50.47 of this chapter and the requirements of appendix E to part 50 of this chapter, or § 50.160 of this chapter. To the extent approval of emergency plans is sought, the application must contain the information required by § 50.33(g) and (j) of this chapter.

* * * * *

■ 14. Revise § 52.18 to read as follows:

§ 52.18 Standards for review of applications.

Applications filed under this subpart will be reviewed according to the applicable standards set out in 10 CFR part 50 and its appendices and 10 CFR part 100. In addition, the Commission shall prepare an environmental impact statement during review of the application, in accordance with the applicable provisions of 10 CFR part 51. The Commission shall determine, after consultation with Federal Emergency Management Agency, as applicable, whether the information required of the applicant by § 52.17(b)(1) shows that there is not significant impediment to the development of emergency plans that cannot be mitigated or eliminated by measures proposed by the applicant, whether any major features of emergency plans submitted by the applicant under § 52.17(b)(2)(i) are acceptable in accordance with either the applicable standards of § 50.47 of this chapter and the requirements of appendix E to part 50 of this chapter, or § 50.160 of this chapter, and whether any emergency plans submitted by the applicant under § 52.17(b)(2)(ii) provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.

■ 15. In § 52.79, revise paragraph (a)(21) to read as follows:

§ 52.79 Contents of applications; technical information in final safety analysis report.

(a) * * *

(21) Emergency plans complying with the requirements of § 50.47 of this chapter, and appendix E to part 50 of this chapter, or for a small modular reactor or a non-light-water reactor

license applicant, the requirements in either § 50.160 of this chapter or appendix E to part 50 of this chapter and § 50.47 of this chapter;

* * * * *

Dated at Rockville, Maryland, this 1st day of May, 2020.

For the Nuclear Regulatory Commission.

Annette L. Vietti-Cook,

Secretary to the Commission.

Note: The following Appendix will not appear in the Code of Federal Regulations.

Separate Views of Commissioner Baran

For the last 40 years, NRC has required emergency planning zones, or EPZs, around nuclear power plants ''to assure that prompt and effective actions can be taken to protect the public in the

event of an accident.'' [1] Every one of the 96 operating large light-water reactors in the country has a plume exposure pathway EPZ that extends about 10 miles around the site with dedicated offsite radiological emergency plans and protective actions in place to avoid or reduce radiation dose to the public during an accident. An ingestion exposure pathway EPZ with a radius of 50 miles around each of these sites is designed to avoid or reduce dose from consuming food and water contaminated by a radiological release. The EPZs and dedicated radiological emergency plans are meant to provide multiple layers of protection—or defense-in-depth—against potential radiological exposure. Other NRC requirements are focused on preventing or mitigating a radioactive release. The emergency planning regulations are there to provide another layer of defense in case a release occurs despite those safety requirements. In other words, EPZs and radiological emergency planning are designed to address low-probability, high-consequence events. The Federal Emergency Management Agency (FEMA) assesses the adequacy of the offsite emergency plans, and NRC regulations require licensees to hold offsite emergency preparedness drills at each plant at least once every 2 years to practice implementing the plans.[2]

Under this proposed rule, emergency planning for small modular reactors (SMRs) and non-light-water reactors would be flimsy by comparison. Instead of a 10-mile plume exposure pathway EPZ, these reactors would have EPZs that encompass only areas where the projected dose from ''credible'' accidents could exceed 1 rem. An EPZ extending only to the site boundary is explicitly permitted under this methodology. In the case of a site-boundary EPZ, NRC would not require dedicated offsite radiological emergency planning and FEMA would have no role in evaluating the adequacy of a site's emergency plans. In addition, the proposed rule would eliminate the requirement for an ingestion exposure pathway EPZ and no longer require a specific drill frequency for emergency planning exercises. Overall, this proposed rule represents a radical departure from more than 40 years of radiological emergency planning.

No new SMR or non-light-water reactor designs have yet been approved by NRC, and only one SMR design has been submitted for the staff's review. These new designs could potentially be safer than current large light-water-reactor designs. But that does not eliminate the need for EPZs and dedicated offsite emergency planning to provide defense-in-depth in case something goes wrong.

Since 1978, when the concept of an EPZ was first developed, the size of an EPZ has never been exclusively based on the likelihood of an accident occurring. The joint NRC–EPA task force that introduced the EPZ concept specifically stated: ''Emergency planning is not based upon quantified probabilities of incidents or accidents.'' [3] Its foundational task force report, referred to as NUREG–0396, explained that ''[r]adiological emergency planning is not based upon probabilities, but on public perceptions of the problem and what could be done to protect health and safety.'' [4] This was not an isolated statement. The task force found that EPZ size should be ''derived from the characteristics of design basis and Class 9 accident consequences.'' [5] Class 9 accidents were defined as those ''considered to be so low in probability as not to require specific additional provisions in the design of a reactor facility,'' including total core melt scenarios ''in which the containment catastrophically fails and releases large quantities of radioactive materials directly to the atmosphere.'' [6] Today, we refer to these as beyond-design-basis accidents. NRC and EPA understood that these kinds of extreme accidents were unlikely, but they also knew that EPZs should be in place to provide defense-in-depth because ''the probability of an accident involving a significant release of radioactive material, although small, is not zero.'' [7] The task force further concluded that nuclear accidents were unique in important ways. The report explained: ''the potential consequences of improbable but nevertheless severe power reactor accidents, while comparable in some sense to severe natural or man-made disasters which would trigger an ultimate protective measure such as evacuation, do require some specialized planning considerations.'' [8]

NRC's recognition of the important role emergency planning plays in providing defense-in-depth endured over the years. In the 1986 Safety Goals Policy Statement, even as the Commission focused on the quantitative risk of nuclear reactor accidents, the Commission recognized ''emergency planning as [an] integral part[ ] of the defense-in-depth concept associated with its accident prevention and mitigation philosophy.'' [9] The Commission stated that ''emergency response capabilities are mandated to provide additional defense-in-depth protection to the surrounding populations.'' [10] Similarly, when the agency was working through non-light-water reactor issues in 1993, the NRC staff proposed ''no changes to the existing regulations governing EP for non-light-water reactor licensees,'' explaining that it ''views the inclusion of emergency preparedness by advanced reactor licensees as an essential element in NRC's 'defense-in-depth' philosophy.'' [11] Four years later, the staff emphasized the importance of getting the buy-in of federal, state, and local emergency response agencies for any emergency response changes relating to new, potentially safer reactor designs.[12]

But these considerations are sidelined with the proposed rule. Under the rule's EPZ sizing methodology, the quantitative dose formula exclusively determines the size of the EPZ. It is a purely quantitative, risk-based determination rather than a risk-informed decision that accounts for expert judgment, defense-in-depth, and public confidence. With this proposed rule, no one is exercising any human judgment about how large an EPZ should be. It is simply a mathematical calculation.

The NRC staff acknowledges in the draft proposed rule that emergency planning is supposed to be ''risk-informed rather than risk-based'' and ''independent of accident probability.'' [13] After all, an existing plant's EPZ does not change every time a plant modification reduces the risk of an accident. A large light-water-reactor licensee does not (and should not) get a smaller EPZ because it installs an additional emergency diesel generator or stores FLEX equipment on site. But

[1] NUREG–0396, *Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants* (1978) at 11.

[2] The regulations require a full set of emergency preparedness exercises to be conducted at each plant over an 8-year cycle.

[3] *Id.* at I–2.

[4] *Id.*

[5] *Id.* at 16.

[6] *Id.* at 26, I–6.

[7] *Id.* at II–1.

[8] *Id.* at III–1, III–2.

[9] 51 FR 28044 (1986).

[10] *Id.*

[11] SECY–93–0092, *Issues Pertaining to the Advanced Reactor (PRISM, MHTGR, and PIUS) and CANDU 3 Designs and Their Relationship to Current Regulatory Requirements* at 13.

[12] SECY–97–0020, *Results of Evaluation of Emergency Planning for Evolutionary and Advanced Reactors.*

[13] SECY–18–0103, *Proposed Rule: Emergency Preparedness for Small Modular Reactors and Other New Technologies,* Enclosure 1, Draft Proposed Rule at 30.

the proposed rule embodies just that sort of exclusively quantitative approach. Instead of risk being one important factor considered in setting emergency planning requirements, it would become the only factor that matters. For any SMR or non-light-water reactor that met the dose criteria for a site boundary EPZ, there would be no dedicated off-site radiological emergency planning. That element of defense-in-depth would be dropped completely.

FEMA has expressed major concerns about the NRC staff's approach. It disagrees that quantitative dose criteria should completely determine the size of an EPZ. Consistent with NUREG–0396, FEMA has expressed its support for ''a methodology for EPZ sizing that takes into account such 'non-technical' criteria'' as public confidence.[14]

Moreover, ''FEMA has consistently raised concerns about a methodology that allows for a site boundary EPZ for a commercial nuclear power plant.'' [15] In the absence of an EPZ and dedicated offsite radiological emergency planning, emergency responders would be left with all-hazards planning. FEMA does not believe that all-hazards planning would be adequate in the event of an actual nuclear power plant accident. According to FEMA, ''Radiological [emergency planning] is not sufficiently addressed within the All Hazards framework—radiological [emergency planning] is unique. In a Worst-Case Scenario, our [offsite response organizations] could be challenged to effectively protect the health and safety of the public using an ad hoc [emergency planning] construct.'' [16] FEMA explains that ''[a]dvanced planning—such as provided by an EPZ—reduces the complexity of the decision-making process during an incident.'' [17] And FEMA ''stress[es] that the proven best way to ensure offsite readiness is to develop, exercise, and assess [offsite response organization] radiological capabilities, as is now done throughout the offsite EPZ.'' [18] While a radiological emergency plan could be ''scaled up'' to address a more severe accident than what was planned for, FEMA notes that it is ''unrealistic'' to scale up ''non-existent plans'' and that the resulting ''lack of necessary equipment, and shortage of trained emergency personnel could have unfortunate consequences.'' [19]

In short, all-hazards planning would not be as effective as dedicated radiological emergency planning in an actual radiological emergency. As a result, a site boundary EPZ with all-hazards planning would not provide the same level of protection for a community located near a reactor site as an offsite EPZ with dedicated radiological emergency planning. FEMA, therefore, ''believes that the NRC staff conclusion that the proposed methodology of offsite emergency preparedness maintains the same level of protection as a ten-mile EPZ is unsupported.'' [20]

We need to take FEMA's warnings seriously. FEMA has a key role in determining whether the emergency planning for a nuclear power plant site is adequate. Under NRC's regulations, a nuclear power plant license cannot be issued unless NRC makes a finding that the major features of the emergency plan meet the regulatory requirements. And NRC is supposed to base its finding on FEMA's determinations as to whether the offsite emergency plans are adequate and whether there is reasonable assurance that they can be implemented. In fact, under NRC's regulations, ''in any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on questions of adequacy and implementation capability.'' [21] FEMA has this prominent role in our licensing process because of its well-known expertise in this area. Yet, under the proposed rule, FEMA would have no role in assessing the adequacy of offsite emergency plans and capabilities for reactors with a site boundary EPZ.[22]

In addition to the issues identified by FEMA, there are several other significant problems with the proposed rule.

First, the logic of the proposed EPZ sizing methodology could be applied to the existing fleet of large light-water reactors to weaken the current level of protection. As the Advisory Committee on Reactor Safeguards noted:

> No technical basis is stated in the rule or the guidance for restricting the use of the new rule to SMRs and [other new technologies] with a limit on thermal power. The rule could apply to any reactor technology regardless of size. During our meetings, the staff acknowledged this point.[23]

In fact, the proposed rule explicitly seeks comment on whether to apply this kind of approach to large light-water reactors.[24] This opens the door to smaller EPZs and reduced emergency planning for the existing fleet of power reactors. If the proposed rule's formulaic approach is adopted, a precedent will be established for applying a purely risk-based methodology to EPZ sizing.

Second, the proposed rule does not account for the possibility of accidents affecting more than one SMR module. Even though some SMR designs contemplate several reactors at one site, the EPZ sizing methodology addresses each reactor in isolation. This ignores a key lesson of the Fukushima accident—that severe natural disasters can simultaneously threaten multiple reactors at a site. Under the draft proposed rule, a SMR is defined as a power reactor that produces less than 1,000 megawatts-thermal. The combined heat energy produced by just two SMRs of this size could be larger than that of some existing large light-water reactors in the U.S. But, under the proposed rule, each module could individually qualify for a site boundary EPZ without consideration of the other.

Third, unlike the existing regulations for large light-water reactors, the proposed rule ''would not define the required frequency of drills and exercises'' for emergency preparedness.[25] As a result, SMR and non-light-water reactor licensees would not be required to conduct a full offsite emergency preparedness drill every 2 years. The NRC staff provides no basis for this weaker standard.

Finally, the proposed rule would eliminate the ingestion pathway EPZ for SMRs and non-light-water reactors. The NRC staff argues that prior quarantines of spinach and eggs in response to E. Coli and salmonella infections ''demonstrate[] that a response to prevent ingestion of contaminated foods and water could be performed in an expeditious manner without a predetermined planning zone.'' [26] No FEMA evaluation of this change is provided. Nor is there any discussion of the effectiveness of ad hoc responses to previous radiological releases.

[14] Letter from Michael S. Casey, Director, Technological Hazards Division, FEMA to NRC (Aug. 24, 2019) (ML19240A938).

[15] *Id.*

[16] Letter from Michael S. Casey, Director, Technological Hazards Division, FEMA to NRC (July 8, 2019) (ML19189A318).

[17] *Id.*

[18] *Id.*

[19] Letter from Michael S. Casey, Director, Technological Hazards Division, FEMA to NRC (Aug. 24, 2019) (ML19240A938).

[20] *Id.*

[21] 10 CFR 50.47.

[22] *See* Draft Proposed Rule at 47 (''for SMRs and [other new technologies] within the scope of this proposed rule, FEMA findings and determinations regarding reasonable assurance . . . would only be needed for a facility where the plume exposure pathway EPZ extends beyond the site boundary requiring dedicated offsite radiological EP plans for the facility.'')

[23] Letter from Michael Corradini, Chairman, ACRS to NRC (Oct. 19, 2018) (ML18291B248).

[24] Draft Proposed Rule at 60.

[25] Draft Proposed Rule at 39.

[26] Draft Proposed Rule at 55.

Moreover, if the staff's unbounded rationale were adopted, it could ultimately lead to ingestion pathway EPZs being dropped for the existing fleet of large light-water reactors.

For these reasons, I do not support finalizing the proposed rule in its current form. NRC needs a rule that provides regulatory certainty for potential applicants and recognizes that SMRs and non-light-water reactors will be different than traditional, large light-water reactors. It makes sense to have a graded approach that accounts for potential safety improvements in new designs. But the rule should not be purely risk-based, relying entirely on the results of a dose formula. Instead, NRC should issue a rule to establish the following emergency planning requirements for three categories of nuclear power plants.

SMRs and non-light-water reactors with a thermal output of more than 20 megawatts would be eligible for a 2-mile EPZ, as long as they meet the dose standard at that distance. A 2-mile EPZ recognizes that these new technologies could be safer than large light-water reactors while ensuring that there will be dedicated offsite radiological emergency planning to provide defense-in-depth in the unlikely event of a severe accident. To account for future potential technological advances, an alternate EPZ smaller than 2 miles should be available if NRC, FEMA, and the host state all agree that the alternate EPZ would provide for an effective and adequate response in the event of a severe radiological emergency. The rule should include an EPZ sizing methodology that accounts for the possibility of accidents affecting more than one SMR module, provide for an appropriately-sized ingestion pathway EPZ, and maintain the existing requirements to conduct an offsite emergency preparedness drill every 2 years and the full suite of emergency preparedness exercises over an 8-year cycle.

SMRs and non-light-water reactors with a thermal output of 20 megawatts or less would be eligible for a site boundary EPZ, as long as they meet the dose standard at that distance. Reactors of this size, essentially micro-reactors, would present accident consequences comparable to existing research and test reactors, which are not subject to offsite emergency planning requirements.[27]

Large light-water reactors, as well as any SMRs or non-light-water reactors that do not meet the dose standard for a 2-mile EPZ, would continue to have a 10-mile EPZ.

In my view, this approach strikes the right balance. It recognizes the potential for improved designs with lower risks, while maintaining defense-in-depth to protect the public. It builds on 40 years of experience with emergency planning rather than discarding it. During the comment period, a broad range of stakeholders will have an opportunity to offer their views on how this approach can be further refined in the rule.

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[27] The largest currently operating test reactor has a power level of 20 megawatts thermal.

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Part VI

The President

Proclamation 10029—Military Spouse Day, 2020

Executive Order 13921—Promoting American Seafood Competitiveness and Economic Growth

Federal Register
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Tuesday, May 12, 2020

Presidential Documents

Title 3—

The President

Proclamation 10029 of May 7, 2020

Military Spouse Day, 2020

By the President of the United States of America

A Proclamation

Military spouses, who stand alongside our men and women in uniform, share in our service members' heroic endeavors through selfless service, immeasurable contributions, and noble sacrifices. Through their dedication to their loved ones, military spouses support the mission of our Armed Forces to defend our Nation and preserve our liberty. On Military Spouse Day, we pay tribute to these extraordinary individuals who strengthen and enrich our fighting forces, our communities, and our Republic.

The abiding capacity of our Nation's military spouses to balance the many demands of military life reflects their unwavering spirit, fortitude, and grace. They support loved ones who have answered our country's call to duty, raise children far from extended family, and invest in their communities through volunteer service. At the same time, demonstrating their loyal devotion to a cause greater than self, many of them pursue their own educational and career goals and routinely face the stress and uncertainty of frequent moves, as well as the heartache and loneliness of deployment. Their individual stories, interests, and talents are unique, but military spouses share the common bonds of selflessness, strength of character, and faithfulness to a Soldier, Sailor, Airman, Marine, Coast Guardsman, or member of the Space Force.

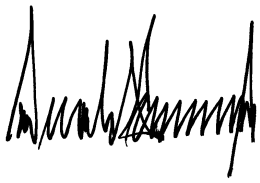
Our Nation's military spouses bring considerable talent, expertise, and experience to the workplace, and their employment is critical to military recruitment, retention, and readiness. My Administration recognizes that our military spouses face unique obstacles in obtaining and retaining employment. Occupational licensing requirements disproportionally affect them; they earn substantially less than other labor market participants earn; and they currently face an elevated unemployment rate. To help solve this problem, last December, I signed into law legislation that changed residency requirements to allow military spouses to retain their State of residency for business purposes, eliminating the long and expensive process of having to re-register their business following a change in duty station. This legislation also doubled the reimbursement amount for occupational licensing and recertification costs from $500 to $1,000 for military spouses who have a permanent change of station, helping to defray costs for those who work in fields that require documentation.

My Administration is also working with the private, public, and non-profit sectors to help create meaningful jobs, careers, and economic empowerment for military spouses. Through the Department of Defense's Military Spouse Employment Partnership program, we have secured commitments from more than 400 American companies and 13 Federal agencies to recruit, hire, train, retrain, and support military spouses. Additionally, last year, we held two business summits at the White House that resulted in participating companies pledging to work to improve military employment opportunities for military spouses. These patriotic employers are making efforts to review and reduce requirements for certain jobs, partner with other companies to assist with job relocation after a change in duty station, and educate managers on the lifestyle of military spouses and the challenges they face.

Today, we salute the spirit and patriotism of the exceptional women and men who serve as military spouses and embody the best of America. Military spouses are among our country's unsung heroes, serving as the heart of the home front and providing tremendous strength to our Armed Forces. On this Military Spouse Day, the First Lady and I urge our fellow Americans to extend sincere gratitude to our Nation's incredible military spouses.

NOW, THEREFORE, I, DONALD J. TRUMP, 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 May 8, 2020, as Military Spouse Day. I call upon the people of the United States to honor military spouses with appropriate ceremonies and activities.

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



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Presidential Documents

Executive Order 13921 of May 7, 2020

Promoting American Seafood Competitiveness and Economic Growth

By the authority vested in me as President by the Constitution and the laws of the United States of America, and in order to strengthen the American economy; improve the competitiveness of American industry; ensure food security; provide environmentally safe and sustainable seafood; support American workers; ensure coordinated, predictable, and transparent Federal actions; and remove unnecessary regulatory burdens, it is hereby ordered as follows:

Section 1. *Purpose.* America needs a vibrant and competitive seafood industry to create and sustain American jobs, put safe and healthy food on American tables, and contribute to the American economy. Despite America's bountiful aquatic resources, by weight our Nation imports over 85 percent of the seafood consumed in the United States. At the same time, illegal, unreported, and unregulated fishing undermines the sustainability of American and global seafood stocks, negatively affects general ecosystem health, and unfairly competes with the products of law-abiding fishermen and seafood industries around the world. More effective permitting related to offshore aquaculture and additional streamlining of fishery regulations have the potential to revolutionize American seafood production, enhance rural prosperity, and improve the quality of American lives. By removing outdated and unnecessarily burdensome regulations; strengthening efforts to combat illegal, unreported, and unregulated fishing; improving the transparency and efficiency of environmental reviews; and renewing our focus on long-term strategic planning to facilitate aquaculture projects, we can protect our aquatic environments; revitalize our Nation's seafood industry; get more Americans back to work; and put healthy, safe food on our families' tables.

Sec. 2. *Policy.* It is the policy of the Federal Government to:

(a) identify and remove unnecessary regulatory barriers restricting American fishermen and aquaculture producers;

(b) combat illegal, unreported, and unregulated fishing;

(c) provide good stewardship of public funds and stakeholder time and resources, and avoid duplicative, wasteful, or inconclusive permitting processes;

(d) facilitate aquaculture projects through regulatory transparency and long-term strategic planning;

(e) safeguard our communities and maintain a healthy aquatic environment;

(f) further fair and reciprocal trade in seafood products; and

(g) continue to hold imported seafood to the same food-safety requirements as domestically produced products.

Sec. 3. *Definitions.* For purposes of this order:

(a) ''Aquaculture'' means the propagation, rearing, and harvesting of aquatic species in controlled or selected environments;

(b) ''Aquaculture facility'' means any land, structure, or other appurtenance that is used for aquaculture;

(c) ''Aquaculture project'' means a project to develop the physical assets designed to provide or support services to activities in the aquaculture sector, including projects for the development or construction of an aquaculture facility;

(d) ''Exclusive economic zone of the United States'' means the zone established in Proclamation 5030 of March 10, 1983 (Exclusive Economic Zone of the United States of America);

(e) ''Lead agency'' has the meaning given that term in the regulations of the Council on Environmental Quality, contained in title 40, Code of Federal Regulations, that implement the procedural provisions of the National Environmental Policy Act (NEPA) (42 U.S.C. 4321 *et seq.*);

(f) ''Maritime domain'' means all areas and things of, on, under, relating to, adjacent to, or bordering on a sea, ocean, or other navigable waterway, including all maritime-related activities, infrastructure, people, cargo, and vessels and other conveyances;

(g) ''Maritime domain awareness'' means the effective understanding of anything associated with the global maritime domain that could affect the security, safety, economy, or environment of the United States; and

(h) ''Project sponsor'' means an entity, including any private, public, or public-private entity, that seeks an authorization for an aquaculture project.

Sec. 4. *Removing Barriers to American Fishing.* (a) The Secretary of Commerce shall request each Regional Fishery Management Council to submit, within 180 days of the date of this order, a prioritized list of recommended actions to reduce burdens on domestic fishing and to increase production within sustainable fisheries, including a proposal for initiating each recommended action within 1 year of the date of this order.

(i) Recommended actions may include changes to regulations, orders, guidance documents, or other similar agency actions.

(ii) Recommended actions shall be consistent with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 *et seq.*); the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.*); the Marine Mammal Protection Act (16 U.S.C. 1361 *et seq.*); and other applicable laws.

(iii) Consistent with section 302(f) of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1852(f)), and within existing appropriations, the Secretary of Commerce shall provide administrative and technical support to the Regional Fishery Management Councils to carry out this subsection.

(b) The Secretary of Commerce shall review and, as appropriate and to the extent permitted by law, update the Department of Commerce's contribution to the Unified Regulatory Agenda based on an evaluation of the lists received pursuant to subsection (a) of this section.

(c) Within 1 year of the date of this order, the Secretary of Commerce shall submit to the Director of the Office of Management and Budget, the Assistant to the President for Economic Policy, the Assistant to the President for Domestic Policy, and the Chair of the Council on Environmental Quality a report evaluating the recommendations described in subsection (a) of this section and describing any actions taken to implement those recommendations. This report shall be updated annually for the following 2 years.

Sec. 5. *Combating Illegal, Unreported, and Unregulated Fishing.* (a) Within 90 days of the date of this order, the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration (NOAA), shall issue, as appropriate and consistent with applicable law, a notice of proposed rulemaking further implementing the United Nations Food and Agriculture Organization Agreement on Port State Measures to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing, which entered into force on June 5, 2016 (the Port State Measures Agreement).

(b) The Secretary of State, the Secretary of Commerce, the Secretary of Homeland Security, and the heads of other appropriate executive departments and agencies (agencies) shall, to the extent permitted by law, encourage public-private partnerships and promote interagency, intergovernmental, and international cooperation in order to improve global maritime domain awareness, cooperation concerning at-sea transshipment activities, and the effectiveness of fisheries law enforcement.

(c) The Secretary of State, the Secretary of Commerce, the Secretary of Health and Human Services, and the Secretary of Homeland Security shall, consistent with applicable law and available appropriations, prioritize training and technical assistance in key geographic areas to promote sustainable fisheries management; to strengthen and enhance existing enforcement capabilities to combat illegal, unreported, and unregulated fishing; and to promote implementation of the Port State Measures Agreement.

Sec. 6. *Removing Barriers to Aquaculture Permitting*. (a) For aquaculture projects that require environmental review or authorization by two or more agencies in order to proceed with the permitting of an aquaculture facility, when the lead agency has determined that it will prepare an environmental impact statement (EIS) under NEPA, the agencies shall undertake to complete all environmental reviews and authorization decisions within 2 years, measured from the date of the publication of a notice of intent to prepare an EIS to the date of issuance of the Record of Decision (ROD), and shall use the ''One Federal Decision'' process enhancements described in section 5(b) of Executive Order 13807 of August 15, 2017 (Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects), and in subsections (a)(ii) and (iii) of this section. For such projects:

(i) NOAA is designated as the lead agency for aquaculture projects located outside of the waters of any State or Territory and within the exclusive economic zone of the United States and shall be responsible for navigating the project through the Federal environmental review and authorization process, including the identification of a primary point of contact at each cooperating and participating agency;

(ii) Consistent with the ''One Federal Decision'' process enhancements, all cooperating and participating agencies shall cooperate with the lead agency and shall respond to requests for information from the lead agency in a timely manner;

(iii) Consistent with the ''One Federal Decision'' process enhancements, the lead agency and all cooperating and participating agencies shall record all individual agency decisions in one ROD, unless the project sponsor requests that agencies issue separate NEPA documents, the NEPA obligations of a cooperating or participating agency have already been satisfied, or the lead agency determines that a single ROD would not best promote completion of the project's environmental review and authorization process; and

(iv) The lead agency, in consultation with the project sponsor and all cooperating and participating agencies, shall prepare a permitting timetable for the project that includes the completion dates for all federally required environmental reviews and authorizations and for issuance of a ROD, and shall make the permitting timetable publicly available on its website.

(b) Within 90 days of the date of this order, the Secretary of the Army, acting through the Assistant Secretary of the Army for Civil Works, in consultation with the Secretary of the Interior, the Secretary of Agriculture, the Secretary of Commerce, the Secretary of Homeland Security, the Administrator of the Environmental Protection Agency, other appropriate Federal officials, and appropriate State officials, shall:

(i) develop and propose for public comment, as appropriate and consistent with applicable law, a proposed United States Army Corps of Engineers nationwide permit authorizing finfish aquaculture activities in marine and coastal waters out to the limit of the territorial sea and in ocean waters beyond the territorial sea within the exclusive economic zone of the United States;

(ii) assess whether to develop a United States Army Corps of Engineers nationwide permit authorizing finfish aquaculture activities in other waters of the United States;

(iii) develop and propose for public comment, as appropriate and consistent with applicable law, a proposed United States Army Corps of Engineers nationwide permit authorizing seaweed aquaculture activities in marine and coastal waters out to the limit of the territorial sea and in ocean waters beyond the territorial sea within the exclusive economic zone of the United States;

(iv) assess whether to develop a United States Army Corps of Engineers nationwide permit authorizing seaweed aquaculture activities for other waters of the United States;

(v) develop and propose for public comment, as appropriate and consistent with applicable law, a proposed United States Army Corps of Engineers nationwide permit authorizing multi-species aquaculture activities in marine and coastal waters out to the limit of the territorial sea and in ocean waters beyond the territorial sea within the exclusive economic zone of the United States; and

(vi) assess whether to develop a United States Army Corps of Engineers nationwide permit authorizing multi-species aquaculture activities for other waters of the United States.

Sec. 7. *Aquaculture Opportunity Areas.* (a) The Secretary of Commerce, in consultation with the Secretary of Defense, the Secretary of the Interior, the Secretary of Agriculture, the Secretary of Homeland Security, the Administrator of the Environmental Protection Agency, other appropriate Federal officials, and appropriate Regional Fishery Management Councils, and in coordination with appropriate State and tribal governments, shall:

(i) within 1 year of the date of this order, identify at least two geographic areas containing locations suitable for commercial aquaculture and, within 2 years of identifying each area, complete a programmatic EIS for each area to assess the impact of siting aquaculture facilities there; and

(ii) for each of the following 4 years, identify two additional geographic areas containing locations suitable for commercial aquaculture and, within 2 years of identifying each area, complete a programmatic EIS for each area to assess the impact of siting aquaculture facilities there.

(b) A programmatic EIS completed pursuant to subsection (a) of this section may include the identification of suitable species for aquaculture in those particular locations, suitable gear for aquaculture in such locations, and suitable reporting requirements for owners and operators of aquaculture facilities in such locations.

(c) In identifying specific geographic areas under subsection (a) of this section, the Secretary of Commerce shall solicit and consider public comment and seek to minimize unnecessary resource use conflicts as appropriate, including conflicts with military readiness activities or operations; navigation; shipping lanes; commercial and recreational fishing; oil, gas, renewable energy, or other marine mineral exploration and development; essential fish habitats, under the Magnuson-Stevens Fishery Conservation and Management Act; and species protected under the Endangered Species Act of 1973 or the Marine Mammal Protection Act.

Sec. 8. *Improving Regulatory Transparency for Aquaculture.* (a) Within 240 days of the date of this order, the Secretary of Commerce, in consultation with other appropriate Federal and State officials, shall prepare and place prominently on the appropriate NOAA web page a single guidance document that:

(i) describes the Federal regulatory requirements and relevant Federal and State agencies involved in aquaculture permitting and operations; and

(ii) identifies Federal grant programs applicable to aquaculture siting, research, development, and operations.

(b) The Secretary of Commerce, acting through the Administrator of NOAA, shall update this guidance as appropriate, but not less than once every 18 months.

Sec. 9. *Updating National Aquaculture Development Plan.* (a) Within 180 days of the date of this order, the Secretary of the Interior, the Secretary of Agriculture, and the Secretary of Commerce, in consultation with the Joint Subcommittee on Aquaculture, established pursuant to the National Aquaculture Act of 1980 (16 U.S.C. 2801 *et seq.*), shall assess whether to revise the National Aquaculture Development Plan, consistent with 16 U.S.C. 2803(a)(2) and (d), in order to strengthen our Nation's domestic aquaculture production and improve the efficiency and predictability of aquaculture permitting, including permitting for aquaculture projects located outside of the waters of any State or Territory and within the exclusive economic zone of the United States.

(b) In making any revisions to the National Aquaculture Development Plan as a result of this assessment, the Secretary of the Interior, the Secretary of Agriculture, and the Secretary of Commerce shall, as appropriate:

(i) include the elements described at 16 U.S.C. 2803(b) and (c) and the appropriate determinations described at 16 U.S.C. 2803(d);

(ii) include programs to analyze, and formulate proposed resolutions of, the legal or regulatory constraints that may affect aquaculture, including any impediments to establishing security of tenure—that is, use rights with a specified duration tied to a particular location—for aquaculture operators, owners, and investors; and

(iii) consider whether to include a permitting framework, including a delineation of agency responsibilities for permitting and associated agency operations, consistent with section 6 of this order and with the ''One Federal Decision'' Framework Memorandum issued on March 20, 2018, by the Office of Management and Budget and the Council on Environmental Quality, pursuant to Executive Order 13807.

(c) The Secretary of the Interior, the Secretary of Agriculture, and the Secretary of Commerce, in consultation with the Subcommittee on Aquaculture, shall subsequently assess, not less than once every 3 years, whether to revise the National Aquaculture Development Plan, as appropriate and consistent with 16 U.S.C. 2803(d) and (e). If the Secretary of the Interior, the Secretary of Agriculture, and the Secretary of Commerce decide not to revise the National Aquaculture Development Plan, they shall within 15 days of such decision submit to the Assistant to the President for Economic Policy and the Assistant to the President for Domestic Policy a report explaining their reasoning.

Sec. 10. *Promoting Aquatic Animal Health.* (a) Within 30 days of the date of this order, the Secretary of Agriculture, in consultation with the Secretary of the Interior, the Secretary of Commerce, other appropriate Federal officials, and States, as appropriate, shall consider whether to terminate the 2008 National Aquatic Animal Health Plan and to replace it with a new National Aquatic Animal Health Plan.

(b) Any new National Aquatic Animal Health Plan shall be completed, consistent with applicable law, within 180 days of the date of this order.

(c) Any new National Aquatic Animal Health Plan shall include additional information about aquaculture, including aquaculture projects located outside

of the waters of any State or Territory and within the exclusive economic zone of the United States, and shall incorporate risk-based management strategies as appropriate.

(d) If adopted, the Plan described in subsections (b) and (c) of this section shall subsequently be updated, as appropriate, but not less than once every 2 years, by the Secretary of Agriculture, in consultation with the Secretary of the Interior, the Secretary of Commerce, other appropriate Federal officials, and States, as appropriate.

Sec. 11. *International Seafood Trade.* (a) In furtherance of fair and reciprocal trade in seafood products, within 30 days of the date of this order, the Secretary of Commerce shall establish an Interagency Seafood Trade Task Force (Seafood Trade Task Force) to be co-chaired by the Secretary of Commerce and the United States Trade Representative (Co-Chairs), or their designees. The Secretary of Commerce shall, to the extent permitted by law and within existing appropriations, provide administrative support and funding for the Seafood Trade Task Force.

(b) In addition to the Co-Chairs, the Seafood Trade Task Force shall include the following members, or their designees:

(i) the Secretary of State;

(ii) the Secretary of the Interior;

(iii) the Secretary of Agriculture;

(iv) the Secretary of Homeland Security;

(v) the Director of the Office of Management and Budget;

(vi) the Assistant to the President for Economic Policy;

(vii) the Assistant to the President for Domestic Policy;

(viii) the Chairman of the Council of Economic Advisers;

(ix) the Under Secretary of Commerce for International Trade;

(x) the Commissioner of Food and Drugs;

(xi) the Administrator of NOAA; and

(xii) the heads of such other agencies and offices as the Co-Chairs may designate.

(c) Within 90 days of the date of this order, the Seafood Trade Task Force shall provide recommendations to the Office of the United States Trade Representative in the preparation of a comprehensive interagency seafood trade strategy that identifies opportunities to improve access to foreign markets through trade policy and negotiations, resolves technical barriers to United States seafood exports, and otherwise supports fair market access for United States seafood products.

(d) Within 90 days of the date on which the Seafood Trade Task Force provides the recommendations described in subsection (c) of this section, the Office of the United States Trade Representative, in consultation with the Trade Policy Staff Committee and the Seafood Trade Task Force, shall submit to the President, through the Assistant to the President for Economic Policy and the Assistant to the President for Domestic Policy, the comprehensive interagency seafood trade strategy described in subsection (c) of this section.

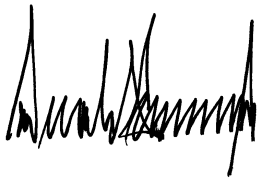
Sec. 12. *General Provisions.* (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.



THE WHITE HOUSE,
May 7, 2020.

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